CALIFORNIA
JUL 10 1952
STATE LIBRARY

THE

AMERICAN ALPINE JOURNAL

1952

PUBLISHED BY

THE AMERICAN ALPINE CLUB
113 EAST 90TH STREET
NEW YORK CITY

THE

AMERICAN ALPINE CLUB

Founded 1902; Incorporated 1915

113 East 90th Street, New York 28, N. Y.

BOARD OF DIRECTORS FOR THE YEAR 1952

OFFICERS

Henry S. Hall, Jr., Cambridge, Mass. ..... *President*
William O. Field, New York, N. Y. ..... *Vice-President*
Henry Buchtel, Denver, Colo. ..... *Vice-President*
Einar Nilsson, Berkeley, Calif. ..... *Vice-President*
Bradley B. Gilman, Worcester, Mass. ..... *Secretary*
David W. Measuroll, Philadelphia, Pa. ..... *Treasurer*

COUNCILLORS

Henry S. Kingman, Minneapolis, Minn.; William R. Latady, Philadelphia, Pa.; John C. Oberlin, Cleveland, Ohio; John C. Case, Morristown, N. J.; William R. Hainsworth, Scarsdale, N. Y.; Walter A. Wood, New York, N. Y.; Richard L. Burdsall, Port Chester, N. Y.; Mrs. Arthur L. Erlanger, New York, N. Y.; Benjamin G. Ferris, Jr., Weston, Mass.

The Club Headquarters, containing the Library, are located at 113 East 90th Street, New York City. Librarian: Miss Helen I. Buck. Assistant Secretary: Miss Gail Oberlin.

THE

AMERICAN ALPINE JOURNAL

EDITORIAL BOARD

Robert H. Bates, Exeter, N. H.
David A. Robertson, Jr., Demarest, N. J. } ..... *Editors*
Robert C. Linck, Philadelphia, Pa. ..... *Business Manager*

Helen I. Buck
William S. Child
Edward Cushing
Joel E. Fisher
William P. House
J. Monroe Thorington

THE AMERICAN ALPINE JOURNAL

VOLUME VIII, No. 2 1952 ISSUE 26

CONTENTS

PAGE

Mount McKinley:

The West Buttress, 1951 . . . . . *Bradford Washburn* 213

Mount Hubbard and Mount Alverstone . . *Robert H. Bates* 227

First Ascent of Mount Hess . . . . . *Alston Paige* 237

Climbs from the Klutlan, 1951 . . . . . *Alfred W. Baxter* 241

West of the Divide:

I. . . . . *Sterling B. Hendricks* 250

II. . . . . *George I. Bell* 253

Ruwenzori, 1951 . . . . . *Ray Garner* 261

Summer in the Dolomites . . . . . *Hans Kraus* 282

American Entries in the Travellers' Book of the Grands Mulets, 1861-75 . . . *J. Monroe Thorington* 290

Proceedings of the Club:

Secretary's Annual Report 308

Annual Meeting and Dinner 309

Report of the Librarian 313

In Memoriam 315

Book Reviews 321

Various Notes 343

The price of the current *Journal* is $3.00 per copy.

WEST FACE OF MOUNT McKINLEY
Seen from the steep snow slopes of Peak "Z" at an altitude of 12,000 feet
Photo, B. Washburn

THE

AMERICAN ALPINE JOURNAL

VOLUME VIII 1952 NUMBER 2

Mount McKinley: The West Buttress, 1951

BRADFORD WASHBURN

THE first six ascents of the South Peak of Mount McKinley (20,290 ft.) and the three recorded ascents of the North Peak (19,440 ft.) were all made by almost exactly the same route: Cache Creek, McGonagall Pass, Muldrow Glacier, Karstens Ridge and Harper Glacier. For half a century the legend persisted that McKinley was virtually impregnable from any other direction than the northeast.[1] Judge Wickersham, who made the first and only attempt to climb the north face of the mountain (June 1903), reached an altitude of only a little over 8000 feet and later wrote: "Our only line of further ascent would be to climb the vertical wall of the mountain at our left, and that is impossible."[2] Dr. Cook, whose inexperienced but hardy party tackled the western buttress of the North Peak toward the end of the same summer, climbed to nearly 11,000 feet: "After a careful search we were compelled to acknowledge defeat, for there was no way around the succession of sheer granite cliffs."[3] Fred Printz, the famous Alaskan horsepacker for both Alfred H. Brooks and Cook, commented sadly on their failure: "It ain't that we can't find a way that's possible, takin' chances. There ain't no way."

Robert Dunn, who was a member of Cook's party and later made the first ascent of Mount Wrangell, was the first to suggest that an experienced climbing team might breach the western barriers

[1] It is assumed that Dr. Cook's claims to an ascent via the South Face are generally considered to have been false.

[2] James Wickersham, *Old Yukon—Tales, Trails and Trials* (Washington, 1938), p. 289.

[3] Frederick A. Cook, *To the Top of the Continent* (London, 1908), p. 70.

of McKinley: "I don't think the slope we did climb would have worried an experienced mountaineer, who might succeed on the yellow wall above."[4] But Belmore Browne, who saw McKinley's western buttress from the Kahiltna country in 1906, was not very hopeful: "I had been able to look along the southwestern end of the mountain . . . Throughout this whole sweep I could not see one promising route."[5] Last but not least, Hudson Stuck, in describing the Muldrow route by which he made the first ascent in 1913, stated dogmatically: "There is no other practicable route than the one they [the sourdoughs of 1910] discovered."[6]

Once McKinley had been climbed, more than 30 years slipped by before the subject of any other route than the famed Muldrow Glacier was suggested again. The peak was far away and, at best, difficult to approach. The ascent was an expensive and lengthy undertaking, even by the "regular" way; and nobody seemed to wish to run the risk of possible failure by attempting the unknown—particularly when all other approaches to McKinley from north, south and west had been rated so difficult and dangerous by the early explorers. In 1947, however, the *American Alpine Journal* published an article by the writer, carefully appraising the unclimbed sides and suggesting possible new routes from both the north and the west.[7] His knowledge of the mountain had been obtained at first hand. He had climbed the peak by the Muldrow route as a member of the Army party in 1942. He had also participated in the first ascents of both Mount Deception (11,800 ft.)[8] and Mount Silverthrone (13,190 ft.), just east of McKinley, and therefore was intimately familiar with the geology and snow conditions of the range. Flights which he had made over and around the mountain on a number of different occasions, for the National Geographic Society and Harvard University, had yielded photographs that revealed, in particular, a route of ascent from Kahiltna Pass[9] that looked highly feasible. Only short bits of

[4] Robert Dunn, *The Shameless Diary of an Explorer* (New York, 1907), pp. 98, 235.

[5] Belmore Browne, *The Conquest of Mount McKinley* (New York, 1913), p. 181.

[6] Hudson Stuck, *The Ascent of Denali* (New York, 1914), p. 18.

[7] Bradford Washburn, "Mount McKinley from the North and West," *A.A.J.*, VI (1947), 283-93.

[8] Bradford Washburn, "The First Ascent of Mount Deception," *Sierra Club Bulletin*, XXXVI (1951), 94-105.

[9] The col between the head of Kahiltna Glacier and the upper basin of Peters Glacier.

this route are visible from the lowlands to the northwest of the mountain and from the summits of Mounts Foraker and Hunter. No part of it can be seen from the south. If it had not been noticed first from the air, many years might have gone by before a ground party stumbled on it while exploring the upper reaches of the Peters or Kahiltna Glacier.

In the fall of 1950, definite plans began to be laid for an attack on this western buttress of McKinley. Barry Bishop, of Cincinnati, and Dr. Henry Buchtel, of Denver, constituted the original nucleus of the expedition. During the winter they were joined by Dr. John Ambler, Dr. Melvin Griffiths and Jerry More, all of Denver. Equipment had been bought and final details were being ironed out when the party was increased again, from five to eight, by the addition of the writer, James E. Gale and Capt. William D. Hackett, all members of the successful 1947 cosmic ray expedition to McKinley. This 1951 expedition was sponsored jointly by the Boston Museum of Science, the University of Denver and the University of Alaska, whose president, Dr. Terris Moore, contributed his small airplane and his skill as a bush pilot—two assets which were largely responsible for the party's success. The objectives of the expedition were to make as thorough a geologic reconnaissance as possible of this side of the mountain, to carry out ground control essential to the completion of the Museum's large-scale map of the area, and to appraise the proposed route carefully as a possible way by which Denali Pass could be reached safely and economically for purposes of research at high altitudes.

The party approached the 10,000-foot Base Camp at Kahiltna Pass in two four-man groups from opposite directions. Terris Moore flew Buchtel, Gale, Hackett and me to a smooth landing area at 7650 feet on upper Kahiltna Glacier, in four 30-minute hops (18-19 June 1951), operating from the small landing field at the south end of Chelatna Lake. His "Super Cub 125" airplane was equipped with hydraulically-operated ski-wheels, which made possible safe ski-landings on the snow-covered glacier after wheel-takeoffs from the gravel airfield at Chelatna.[10] Thence, this vanguard of the expedition snowshoed five miles up broad, gentle snow slopes almost entirely free of crevasses, and established the Base Camp in Kahiltna Pass at mid-

[10] Fifty miles W. of Talkeetna, and 100 miles N.W. of Anchorage.

night on June 21st. Radio communication was set up at once with the Civil Aeronautics Administration stations at Talkeetna and Minchumina, and by breakfast-time on June 22nd a C-47 transport of the Tenth Rescue Squadron (Alaskan Air Command) arrived to effect the drop of virtually all of the expedition's equipment. A perfect job of air delivery was completed in barely 30 minutes—a total of 2570 pounds—38 free-fall units and five parachute-loads of breakable equipment. Nothing was lost or damaged, and not a single bundle landed more than 300 yards from camp!

Careful planning, reliable radio and magnificently clear weather on June 21st and 22nd made this rapid advance possible. On June 23rd, in a miserable downpour of rain, the second half of the party (Ambler, Bishop, Griffiths and More) left Wonder Lake by packtrain with Carl Anderson.[11] They crossed the McKinley River, and proceeded downstream to the mouth of the Clearwater and thence cross-lots to the Muddy River.[12] The first camp was pitched in the beautiful spruce timber about a mile below the terminal moraine of Peters Glacier.[13]

From here, the route to the head of Peters Glacier was radically changed from that suggested in my 1947 article, because in 1949 a new and much more practical way had been discovered and photographed by Jim Gale and me on our helicopter exploration of the northwestern approaches to McKinley for the Office of Naval Research. The new route, completely avoiding the lower part of Peters Glacier, traverses the treeless upland just northwest of the base of Peters Dome, and trends southwest for 20 miles (as the crow flies) from the Muddy River campground to Straightaway Glacier. This course keeps well up out of the swampy, forested lowlands and is mainly in the watershed of Slippery Creek and the other tributaries of the Tatlathna River.

The 1951 party followed this route for the most part, detouring to the northwest for a timber camp and horse-feed on the extreme east fork of Birch Creek (2250 ft.). Late on the afternoon of June 25th, they skirted the eastern edge of Straightaway Glacier and made

[11] From Lignite, Alaska. The same packer who had brought the Houston party to Mt. Foraker in 1934.

[12] For details of this route, see Bradford Washburn, "Mount McKinley from the North and West," *A.A.J.*, VI (1947), 286-7.

[13] Originally called this by Brooks in 1902; renamed by Wickersham in 1903. The old name was recently reestablished.

camp in a morainic valley (5300 ft.) about three-quarters of a mile below the sharp main bend in the Straightaway Valley. There the pack-train left them, with minimum food and equipment for the approach over Peters Pass and the upper Peters Basin to the main base at Kahiltna Pass. The four-mile climb to Peters Pass (8000 ft.) was steep and rough over the lower part of the rock-strewn western fork of Straightaway Glacier, and the last thousand feet below the pass required zigzagging through a number of nasty crevasses. These detours probably added almost 50% to the distance.

Geologic collecting was done under Griffiths' direction, and two key survey stations were marked so that Hackett and I could sight them at a later date. One of these was placed on the very top of Peters Dome (10,550 ft.), the first ascent of which was made by Barry Bishop and Jerry More on June 28th for that purpose.

On June 30th, exactly on schedule, Ambler, Bishop, More and Griffiths climbed the headwall of Peters Basin and joined the rest of the party at Base Camp. This ascent was made from a bivouac at about 8500 feet on the level floor of the western lobe of Peters Basin. The ridge which separates the two lobes of the basin was followed all the way to the crest of the little 10,750-foot dome at its head, there being no way to traverse directly to the left into Kahiltna Pass. Snow conditions were abominable—steep blue ice covered with powder snow and breakable crust.

In the meanwhile, the other four members of the party had made excellent headway with their survey program. June 26th had been a superb day, and we had used it well by making the first ascent of "Peak Z,"[14] the massive 12,475-foot snow dome which rises three miles southwest of Kahiltna Pass, at the extreme head of Peters Glacier. This climb had been an easy four-hour snow walk, with glorious views of McKinley, Hunter, Foraker and both the Kahiltna and Peters Valleys. I still believe that the panorama from "Z" ranks with those from the tops of Mount Silverthrone and Mount Lucania as one of the three finest I have ever seen in Alaska.

On June 30th the advance party had also thoroughly reconnoitered the new route up onto McKinley, and marked it with willow

[14] Specifically unnamed as yet; but known by the natives, together with Mt. Crosson, as one of "Denali's children." Originally named Mt. Hunter by Robert Dunn in 1903. This name appears to have been given later to the peak now called Mt. Hunter by an error in identification.

wands as far as 14,000 feet in a nine-hour round trip. The snow conditions were excellent, and the weather was again perfect. The route actually followed scarcely deviated at all from what had been planned on the aerial photographs.

Terris Moore had paid a call on June 25th, dropping in quite casually with a load of miscellaneous equipment, and thereby making the highest airplane landing ever effected in Alaska. A well-marked and tramped landing-strip 800 feet long was ready for his use, and air-ground radio communication gave him additional security for safe operation at this 10,000-foot altitude.

On July 2nd, after a day of bad weather and rest, the party again divided, half climbing "Peak Z" for a final check of survey work and half descending to the cache in Peters Basin to bring up the remaining loads left there by the lowland party.

On the 4th of July, the advance on McKinley began in earnest. Since Gale, Hackett and I, who had come primarily to complete our survey work, had but ten days left before we had to fly back to civilization, the climbing plan was generously arranged in order to give us the maximum chance of climbing McKinley before our deadline. All hands packed heavy loads to the 13,000-foot shoulder, aptly christened Windy Corner; and then two more half-relays were made to bring up supplies previously cached at 11,500 feet and 12,000 feet during the past week. This accomplished, Griffiths, Bishop and More returned to Base Camp for a week of geologic work in the upper Kahiltna Basin, and the rest of the party began the attack on McKinley.

Unfortunately, after ten days of unusually good weather, a wild blizzard descended on the mountain just as the 13,000-foot camp had been established, and everyone was stormbound for a day and a half. Base Camp reported high winds and snow, mixed with rain and sleet. Windy Corner lived up to its reputation, with a gale frequently doing better than 60 miles an hour and on two occasions surpassing 90.[15] However, only a single Logan tent was set up for cooking, and the party rode out the blizzard cozily in a huge double-igloo constructed by Jim Gale.

The storm moderated enough, late on the afternoon of the 6th, to permit a quick relay up to the 14,000-foot level—the limit of the

[15] Anemometer used.

WEST FACE OF MOUNT McKINLEY
Solid line shows route of Washburn party in 1951. Dashes show proposed route up West Buttress of North Peak
Photo, B. Washburn

North Peak
19,460
18,700
16,000
15,5
Kahiltna
Pass, 10,300
1951
Kahiltna Glacier

South Peak
20,320
Denali Pass
18,200
16,150
15,500
14,000
13200

marked trail of a week before. It was very windy and cold there, so we beat a rapid retreat to the warmth of our igloos and made no attempt to climb higher. The next morning dawned bright and clear, with a tremendous wind aloft (above 17,000 ft.), but it was almost calm at camp. We hit the trail again at 9.00 A.M. and made the easy mile and a half to 14,000 feet in just an hour.

Then the toil began. For a thousand feet we plowed almost straight up the slope, *still on snowshoes,* until the breakable wind-blown crust and loose snow beneath it made going virtually hopeless. With snowshoes on, it was too slippery on the crust and steep side-hill; without them, one went in waist-deep. For three hours we *shoveled* a trail two to three feet deep and over 200 yards long, till we got out of this miserable stuff. Then we hit a steep slope (40°) up which we wallowed crotch-deep, but with a firm base far below the surface powder. At 2.45 P.M. we reached the bergschrund at 15,400 feet, so exhausted we could scarcely even eat lunch. At 4.00 P.M., however, we set to work again. Gale and I left our packs and tackled the steep (45°-50°) ice slope above the schrund, while Ambler, Buchtel and Hackett relayed supplies up the exasperating hill from the cache at 14,000 feet.

Whatever doubt had been entertained in some quarters about the success of this expedition centered on what would be found between 15,000 and 17,000 feet. Below and above this, even an inexperienced photo-interpreter could readily see that the going would be safe and easy.

The slope from the bergschrund to the crest of the 16,000-foot shoulder was the steepest part of the climb. It was solid blue ice with several thin layers of snow and breakable crust veneered on top of it. Each step required 20 or 30 hard whacks, and there were but few spots where the ice was soft enough to drive in a firm belay or picket. As we advanced, we left quarter-inch fixed rope all the way, to speed and secure future relays. Just below the shoulder the going got so steep and the laminated ice so treacherous that we tried to find a good route up the rocks (massive granite) just to our right. But the platforms were covered with snow, and most of the best cracks were filled with ice. After an hour of very steep rock work, we rappelled back to the snow, exhausted, and returned rapidly to the schrund down the fixed handline.

Ambler and Buchtel had returned to 13,000 feet for the night,

and we were to press on up to Denali Pass as fast as possible, while they awaited the arrival of the geologic party from below. We built a small three-man igloo for shelter, excavating a narrow flat place on the lower lip of the schrund, and got to bed at 11.30 P.M., completely exhausted after a tremendous day of work.

Here we changed from shoepacs to felt boots and left our snowshoes cached till our return, as one rarely needs them anywhere above 10,000 feet on McKinley. A furious 60-mile gale (S.W.) roared aloft all night, with the temperature at 18°. But we were warm and cozy in our little shelter and awoke at 8.30 A.M. after a good sleep—something which under these conditions would have been absolutely impossible in a tent.

The windstorm had almost blown itself out, leaving great cirrus plumes capping Foraker, Hunter and McKinley and a warm sun beating down on camp. We had a morning of rest, then took three light loads up the ropes to the shoulder. We first cut steps for an hour beyond the limit of the reconnaissance the night before, and then reached the ridge after 30 minutes of easy scrambling through steep but firm broken rocks. As we climbed, we straightened out the kinks in the trail and left fixed ropes stretching all the way from the igloo to the ridge.

At 4.20 P.M., after a bite to eat, we pressed ahead up the crest toward the 17,000-foot shoulder. As we left the upper end of the fixed ropes, Buchtel and Ambler appeared at their lower end, carrying supplies forward up the long staircase.

The final problem was solved in exactly one hour and 40 minutes. The going proved to be as good as our best hopes: steep scrambling and clambering over shattered granite and well-packed snow, in sharp contrast to the treacherous layered ice, powder and crust below 16,000 feet. The views to the northwest and south were stunning—infinitely more varied and dramatic than anything on the other side of McKinley. The Susitna lowland was all clear, so clear, in fact, that Mount Susitna and even the hills behind Anchorage were visible, 150 miles away. Hunter, Foraker and the great, winding Kahiltna lay to the south and west, and thousands of tiny lakes and winding rivers glittered on the plains to the northwest. A great gale still ripped at the summit of McKinley, which had been buried all day in a cirrus frost-cloud. Where we were, gusts

ranged from 20 to 40 miles an hour, but it was unusually warm and pleasant for that altitude (25° above).

We reached the 17,200-foot crest at 6.00 P.M. and cached our loads in full view of Denali Pass, square in front of us and only half a mile away. It looked temptingly close, its ink-black slate rising menacingly against a cold grey cloud that lay behind it to the east. We descended the ridge slowly, collecting 40 pounds of geologic specimens as we went. This is a particularly interesting part of the mountain geologically, as the ridge crosses the dramatic contact between the black slate of the North Peak and the pink McKinley granite just below where we had cached our loads.

Buchtel and Ambler had left their packs at our luncheon-spot on the shoulder and were just disappearing from the lower end of the fixed ropes as we started down from above. By the time we had reached camp, they were almost out of sight, snowshoeing rapidly homeward toward the 13,000-foot camp on the smooth plateau 1500 feet below us.

The next day was another eventful one. We got off at 9.45 A.M., clearing out the camp with three 55-pound packs. The ice slope was miserable. Every step was filled with fresh-blown snow and had to be relocated and kicked out. It was another day of warm (20°), steady wind from the west, but this time we climbed through dense clouds and rime above 16,000 feet. One could scarcely see the man at the other end of the rope when we reached the 17,200-foot cache at 1.45 P.M., and the rocks were all encrusted with beautiful frost feathers. Advancing by dead reckoning and vivid recollection of the aerial photographs, we made our way through thick fog for an hour and a quarter across the broad snow field that lies between the 17,000-foot shoulder and the base of the last slope leading to Denali Pass.

At 3.00 P.M., as we tossed our loads to the ground, a little patch of blue sky appeared overhead, and an hour later the whole storm had settled into the valley. We were in gorgeous clear skies, above a magnificent 16,000-foot sea of clouds. Here we built a large igloo, reckoning that it might have to accommodate as many as five of the Denver party when they came up two or three days later. By sunset (11.00 P.M.) the igloo was done, we had relayed our cache of the day before from the 17,200-foot shoulder, and all the clouds were gone! As we turned in, the myriad lakes and

rivers to the west were all gold. Even Lake Minchumina, 60 miles away, looked as if it were right at our feet. A brilliant half-moon rode in the sky just above the icy dome of Foraker, and the temperature stood at 3° above zero—a tropical reading for that altitude on McKinley, even in midsummer.

July 10th dawned cloudless, except for the usual frost-cloud blanketing the peak of McKinley. This sort of cloud was inevitable with the warm, moist westerly wind that we were having. It never disappeared except when the gale died down or when the air chilled at twilight.

We left camp at 10.20 A.M. and tackled the last great slope of Denali Pass. The going was never really steep—the maximum was probably little over 45°—but the half-hardened sastrugi were enormous and alternated with patches of deep, loose powder and breakable crust lying on solid ice. We swung first to the right and then to the left to avoid a few large crevasses, then wound beneath two huge snow blocks. At 12.15 P.M. we reached the pass (18,200 ft.) after a final half-hour of step-chopping in extremely hard black ice. The western side of McKinley had at last been climbed.

Our old cosmic ray cache was the first familiar sight to meet our eyes. It was still neatly covered with bright yellow parachutes which flapped continually in the icy breeze that never seems to stop sucking through the pass. The scene was amazingly different from what it had been in 1947. Then the snow to the east of the rock collar that forms the pass had been flat, hard and icy; now it was a wild confusion of huge, hard sastrugi, some of them three or four feet high, scoured out by the terrific westerly gales of the last three weeks.

The cache of food and equipment left neatly by Gale, Victoreen and Lange at the end of their cosmic ray work in 1947 was an incredible mess. The 1948 expedition,[16] needing supplies, had removed the covering from the cache, taken what they needed and then, apparently, abandoned it to the elements. If the supplies were repacked and covered, the effort must have been a feeble one, as the whole cache was a solid, immovable mass of material, cemented together with ice and snow—as wanton an exhibition of vandalism as could be seen in the mountains. Luckily, we did not need or count on

[16] Papers later found in the débris confirmed this assumption.

LOOKING STRAIGHT DOWN ON MOUNT McKINLEY FROM 32,500 FEET
Photo, U.S. Air Force

North Peak
18,700
GREAT PLATEAU
16,500
Denali Pass
7,200
Camp 1951
TRUE

Denali Pass
18,200
Cook's Camp 1903
7700
Peters Pass
Peters Glacier
1951
8400
12,120
13,320
Base Camp 1951
Pass
10,790

these supplies, but the day is sure to come when this tragic thoughtlessness may be seriously felt by another party equally in need of food or tentage.[17]

The minimum-recording thermometer left in 1947 a few feet west of this cache on the south side of the pass (the cosmic ray cache is on the north side) registered –59° as the minimum since July 1948.

At one o'clock we decided that the day was still young and that we would try to make a side trip to the top. Although the clouds were down solidly to 19,000 feet, we had no trouble finding our way up the ridge along the 1947 route. In fact, several of our 1947 willow wands were still firmly in place, though broken off short by the wind. The weather was perfect in every direction except for the one summit-cap cloud. This we reckoned would dissipate, as usual, late in the afternoon. If we climbed slowly, it should be gone before we reached the top.

Our guess was right. After crossing the broad plateau between the summit and the Archdeacon's tower in dense fog, we zigzagged, blind, up the summit cone, bearing gently to the right (S.) so as to strike the tip of the Kahiltna Shoulder, rather than become involved in the maze of ice blocks and crevasses on the west side, just below the top of the peak. At 4.45 P.M. the clouds melted away as we approached the crest of the summit ridge, and at 5.30 we reached the top.

The weather was perfect and the view indescribably magnificent in every direction. When we left, 45 minutes later, however, the heat of the sun was gone, the temperature was dropping below zero, and the gusts of a rising (30-40 m.p.h.) southwest wind began to cut like a knife.

We hated to leave. The view was marvellous: Mount Hayes, the Coast Range, Mount Marcus Baker, Mount Spurr, Mount Foraker—all cloudless; Lake Minchumina like a jewel on the plains; the hills behind Anchorage and the grey haze over Cook Inlet; the deep green lowlands of the Clearwater; Wonder Lake; the Tokositna; the Yentna and the Skwentna; then those endless lowlands stretching off to the westward, river after river sparkling in the sun

[17] The Denver party worked for hours to rehabilitate this cache after Washburn, Gale and Hackett had made a preliminary excavation and sorted out its contents. The Superintendent of McKinley Park has an accurate list of what is left. This cache is for *emergency* use and should not be counted on under normal circumstances.

NORTHWEST FACE OF MOUNT McKINLEY

Markings show 1951 route and proposed route up North Peak. Solid lines indicate travelled routes; dots, concealed routes; dashes, proposed routes

Photo, B. Washburn

and twisting and winding off into the distance toward Rainy Pass and the Kuskokwim.

At 6.15 P.M. we tied a bit of orange bunting back on the eight-foot bamboo survey marker that still remained there from our 1947 trip. Then we headed downward, shivering uncontrollably from the bitter cold. At 8.45 we staggered into camp, too tired to do more than eat a bite of supper and turn in.

Things moved rapidly during the next week. After a long sleep, our advance party descended the ridge on the 11th and passed Ambler, Buchtel and Bishop as they reached the igloo at 15,400 feet (4.00 P.M.). We had supper with Griffiths and More at 13,000 feet, and at 1.00 A.M. we were in bed at Base Camp in Kahiltna Pass! On July 12th the vanguard of the Denver party reached the big igloo at 17,300 feet, where we had left all our equipment—even two of the sleeping bags—to speed their progress. And on the 13th they too reached the top on a superb day. Griffiths and More joined them at 17,300 feet that night and made the final climb on the 14th, our wonderful streak of clear weather still holding out.

Terris Moore had flown our first group to Kantishna on the 13th and made two more relays with Ambler and Bishop on the 15th. The last three men were less lucky, as the good weather came to an abrupt end. They had to wait at Kahiltna Pass until the 23rd before there was a momentary lull in the storm and they could be evacuated. The expedition ended officially that afternoon in Anchorage, successful in every respect, and as pleasant a collaboration of eight men and three sponsoring organizations as we could possibly have hoped to have.

In retrospect, I believe that all our party would agree (particularly those three who have climbed both sides of the mountain) that the west side of McKinley is shorter, safer and easier to climb than the Muldrow route, provided the approach to Kahiltna Pass or upper Kahiltna Glacier is made by air.[18] The 44-mile approach up heavily-crevassed Kahiltna Glacier would be so long as to rule it out as impractical, and the lowland approach made by the four members of the Denver party could be very time-consuming and exhausting if all of an expedition's supplies had to be backpacked to Kahiltna Pass from the limit of pack-train travel. An experienced

[18] Aircraft cannot be landed in Mt. McKinley National Park without special permission of the National Park Service.

party, equipped with a reliable radio, might attain Kahiltna Pass with a minimum of supplies and then secure an air-drop of equipment without actually landing there, but this would be an operation fraught with all the problems of McKinley's fickle weather. The ascent of the west side of McKinley without any air support at all would be a much longer and more expensive task than the Muldrow route.

Technically, the western approach to McKinley involves no great difficulties. There is no undue avalanche danger. There are very few crevasses and no large ones at all comparable with those of Muldrow Glacier. The rocks encountered between 16,000 feet and 17,000 feet are firm and safe, and there are excellent bedrock caching areas at 13,000 feet, 16,000 feet and 17,000 feet—an infinite improvement over the northeast approach. The western route on McKinley is a much warmer route, the slopes being faced squarely at the sun, instead of quartering away from it as they do on the northeast side. And last but not least, the prevailing westerly winds are always behind your back as you climb instead of cutting squarely into your face. These last two considerations are of great practical importance in planning the ascent of a high sub-arctic mountain.

Now that McKinley's western ridge has been climbed, the Alaska Range offers, in particular, two outstanding pioneer ascents: the north wall of the North Peak, still a magnificent possibility, and the western ridge of Mount Hunter. Both are ascents that will require powerful and experienced parties. Let us hope that they can soon be tried.

Postscript

[*In response to a request from the Editors, Dr. Buchtel has forwarded these comments on the expedition.*]

The 1951 trip up Mount McKinley was an unusual one. When I say this, I am not referring to the fact that I reached the top—which is, to my friends, the most remarkable fact about the enterprise. The trip was unusual because the route had been scouted entirely by air, no one having set foot on that side of the mountain before the expedition reached it, and because the party was brought in satisfactorily by two different routes and by two different methods of transportation. Most important of all, the entire party reached the top of the mountain and returned safely.

All of us who were on the expedition wish to congratulate Bradford Washburn on his realization that perhaps a route on the west side existed, and for his article in the *American Alpine Journal* calling the possibility to our attention. We can only hope that his proposed route up the Wickersham Ridge will prove as successful as the one up the southwest buttress.

H.B.

Mount Hubbard and Mount Alverstone

Robert H. Bates

MOUNT Hubbard is one of the mighty peaks marking the boundary between Yukon Territory and Alaska. Though not the highest of the St. Elias Mountains, it is very prominent, and it commands superb views of one of the world's wildest areas of snow- and ice-covered mountains. This 14,950-foot* peak was the focal point of the National Geographic Society's Yukon Expedition led by Bradford Washburn in the winter of 1935. He, Adams Carter, Ome Daiber and I hoped at that time to climb Mount Hubbard; but our mission was to survey an unmapped area, and the only side of the mountain we approached closely on the ground proved unclimbable. Though Washburn took some excellent airplane photographs of a route from the southeast, the party was unable to attempt it. In June of the same year, Walter Wood closely examined Mount Hubbard during an American Geographical Society expedition which made the first ascent of 16,644-foot Mount Steele.

Subsequently, expeditions to Mount Hubbard were several times discussed, but until the spring of 1951 none became an actuality. At that time I was delighted to learn that the Arctic Institute of North America was sending another expedition to the St. Elias Mountains to carry out glaciological research, that in connection with it an attempt would be made to climb Mount Hubbard, and that they wanted me to join it. In addition to this mountaineering venture, the party had two other objectives: its main purpose was to study glacier regimen and snow and ice mechanics; but it was also to test experimental clothing and equipment for the U.S. Army. This testing was to be my special job.

Personnel of the expedition included one of the world's leading glaciologists, Professor Robert Sharp, of the California Institute of Technology. During the summer Professor Sharp managed to sink aluminum pipe to the record depth of more than 1000 feet in the Malaspina Glacier. Future examination of this pipe as ice deforms it should provide valuable information concerning the internal flow of glacier ice. Pipe was ferried to the Malaspina by the expedition helicopter, piloted by Albert H. Luke; and the whole undertaking

* Provisional triangulation by Walter A. Wood indicates a height of 15,050 ft.

was supplied from Yakutat by the expedition's ski-wheel-equipped Norsman airplane, flown by veteran pilot Maurice King. The Norsman and its pilot formed the heart of the whole endeavor, just as Walter Wood was the nerve center and brain. The Norsman supplied and tied together the whole enterprise. Flying off the concrete runway at Yakutat on the coast, it was able to land supplies on the beach near the Malaspina Glacier, or at the base camp 70 miles inland on the Seward Glacier, or at the base of Mount Hubbard 100 miles to the east of the Yakutat airfield.

In late June I arrived at Yakutat, where I found Walter and Foresta Wood, their daughter, Valerie, and John Case. Dr. Sharp's party was already at work on the Malaspina Glacier; and Peter Wood, Nicholas Clifford, Geoffrey Hattersley-Smith, of the Defense Research Board at Ottawa, and Paul Townsend, of the U.S. Quartermaster Corps, were ensconced at the nunatak which already had served as base camp for two post-war Arctic Institute expeditions to the area. On June 29th we flew in to join them at this strikingly beautiful belvedere. St. Elias, King Peak, Logan, Lucania, Vancouver, Cook and Augusta are some of the giants in full view of this rock island.

Townsend flew out on the plane that brought us in; but our party was soon augmented by William R. Hainsworth, whom Terris Moore flew in in his ski-wheel-equipped Super-Piper Cub, Archibald MacIntosh, Dr. Allan Bruce-Robertson and later Joseph Stein, of Haverford College. Mrs. Hainsworth also flew in later for a brief visit. Engine trouble at the beginning of July caused the Norsman to fly to Anchorage, where a new engine was installed. Meanwhile on the Malaspina and Seward glaciers perfect weather permitted rapid conditioning and testing, and scientific observations were carried out. At this point I foolishly thrust a ski pole through both the insulated rubber boot I was wearing and my foot, and was laid up for a few days. Thanks to John Case, who applied first aid, and to the skillful medical care of Foresta Wood, who was invaluable throughout the expedition, I was on skis again, after a fashion, in four days.

Walter Wood, John Case and William Hainsworth had crossed the Seward to occupy survey stations and had made a stiff rock climb up what they called the Old Gentlemen's Pinnacle. Another party, MacIntosh, Peter Wood and Nicholas Clifford, also was active,

with the result that the whole climbing-testing group was well acclimatized and keenly anxious to get to Mount Hubbard long before the work on the Norsman could be completed. Unfortunately for us, the weather before the Norsman's return was excellent, while afterwards it was only fair, so that valuable time for Mount Hubbard was lost. Even more serious was the loss of Case, Hainsworth and MacIntosh, who were not able to prolong their vacations and stay for the delayed attempt on Hubbard.

They reached Mount Hubbard, however, for when the weather broke, on July 14th, Walter Wood and I flew an exciting reconnaissance of the mountain from Yakutat, and pronounced that the route Wood and Washburn had previously reconnoitered from the air looked as if it would go. Crevasses appeared unusually bad in the three icefalls along the route, but we both thought that a landing could be made at about 6000 feet, with a good chance of our working through to the Hubbard-Alverstone plateau at about 13,000.

When Walter Wood, John Case and I conferred at Yakutat, it was agreed that Case and I should be flown in to establish a camp at 6000 feet, while Wood prepared supplies for parachuting and other members of the party were brought in from the Seward Glacier. Accordingly, on July 16th, King landed smoothly on what we later called the Cathedral Glacier, on the southeast side of Mount Hubbard, and taxied to within a mile and a half of the first icefall. Case and I, feeling fit, were eager to come to grips with the mountain; but, since there were only two of us and the area was badly crevassed, we decided not to begin our real reconnaissance until nightfall, when the snow would freeze and our operations would be safer.

Travel at night in the St. Elias Range in summer is practical, for sunset and sunrise so merge that no darkness deeper than twilight occurs, and the snow surface, often soggy in the sunlight, becomes safe and firm. Case and I skied to the base of the icefall and carefully worked out a route from the true right bank to a point where the going appeared smooth clear to the second icefall. Much of the going was tricky, and we were forced back once or twice. At one point, the séracs seemed to block us; but a lightly supported bridge, finally discovered, led us to firm snow. Near this point, in the worst of the séracs and crevasses, I saw what appeared to be a stone. Since no rocks were anywhere near, I went

over to pick it up. To my surprise, it jumped up, ran to a near-by crevasse and dove in. Since we were not in Ireland, the rock proved to be only a *Cony,* miles from the nearest grass. Whether he, too, was on a Mount Hubbard expedition or "just looking" we did not learn. Peter Wood, who had been trying to trap conies for a museum, doubtless thought us derelict in our duty for not capturing this one.

Back at camp at six in the morning, we had hardly fallen asleep when the Norsman taxied up beside our tent. Hainsworth, Clifford, MacIntosh and Walter Wood climbed out. All were in fine fettle and anxious to get on the mountain, but Walter had to return to Yakutat to parachute loads at 8000 and 13,000 feet, so that we could attack Hubbard without relaying loads.

Later that day the Norsman came back, and we saw parachutes leaving the plane, though from where we were we could not see where they landed. Our party now was ready to attack the mountain as soon as Walter and Peter Wood came in, but we had not figured on the weather. Before these two could join us, heavy clouds rolled in from the Pacific, and for nearly a week we were kept close to camp. Hainsworth and Clifford made an adroit snow and rock climb, and the rest of us tested boots and skis; but we were a restless party.

Finally, on the 24th of July, Walter and Peter Wood came in and told us how they had been flying the beaches, searching for a Canadian Pacific air liner, bound for Korea, that had disappeared near Yakutat. The 10th Air Rescue Squadron from Anchorage was directing a big search in the Yakutat area, and Canadian planes and others were helping.

Case, Hainsworth and MacIntosh were by now due back in the East. Reluctantly, they climbed aboard the Norsman, wished us luck, and took off. Our party of four was anxious and ready to go. Walter Wood had laid plans so carefully and dropped loads so accurately that with a minimum of worry we could now set forth. Skiing to the first icefall, where we substituted snowshoes for skis, we dodged crevasses by following the trail markers placed on our earlier reconnaissance. The thin bridge was still holding, and soon we were on relatively smooth glacier and heading for the airdrop at 8000 feet. We found two chutes easily, and by three o'clock camp was pitched, just below the second icefall, well out from avalanche

ROUTE THROUGH ICEFALLS TO HUBBARD-ALVERSTONE PLATEAU
Photo, W. A. Wood

danger, and we were enjoying both our tea and the thrill of at last being on the way.

Next morning we rose at three and were soon at grips with the second icefall. This was the steepest of the three and perhaps the hardest to reconnoiter; but our false leads were few, and by ten o'clock we had made our last jump, done our last chopping, and started on the way up a smooth valley below East Hubbard. One o'clock found us through the third icefall and on the 13,000-foot plateau between Hubbard and Alverstone, where three high camp loads had been neatly dropped.

The view here thrilled us. Hubbard and Alverstone dominated everything, but East Hubbard and more distant peaks to the south held the eyes; while if one walked across a gentle slope to the height of land, the vast immensity of the Ice Field Ranges spread before him. That night we had a magnificent sunset view from this fine point of vantage, and returned to camp secure in the feeling that we were in a superbly stocked camp within easy striking distance of our objectives.

In the morning we led around old avalanche débris, up a slope deep in powder snow and between two broken schrunds. Once it appeared that a pair of snowshoes would slip from a pack and drop into the bigger schrund; but they did not fall, and we zigzagged on upward, kicking steps until the edge of a small cirque suggested a second breakfast and a look around. East Hubbard had now dropped below us, and even Alverstone had lost stature. Again we faced the peak. Gradually, as we moved steadily toward the summit ridge, deep powder gave way to shallow powder, then to wind-packed snow. Then suddenly the slope disappeared in front of us, and we gazed out over the vast snow fields and massive ranges beyond. There were Logan, Vancouver, Institute Peak and, under a sea of clouds at 8000 feet, our base camp. There, as we did not know, pilot Maurice King, with Foresta and Valerie Wood, was just taking off to fly to Yakutat.

For several minutes we enjoyed our success, but the biting wind soon urged us to more sheltered slopes, where we could relax, eat pan forte and discuss a faster route down. The new route proved good, and by one o'clock we were back in camp after a fairly easy day.

What fun it was to relax, to enjoy a high tea, and to mull over

HIGH CAMP AND ROUTES ON HUBBARD (LEFT) AND ALVERSTONE
Photo, W. A. Wood

the day's exertions or the morrow's attempt on Mount Alverstone! This peak, about a mile from camp and 500 feet lower than Mount Hubbard, was technically a more serious obstacle.* Reconnaissance had disclosed that a shattered granite rib on the east side of the summit pyramid offered the most likely method of attack, and it was to this point that we snowshoed early the following morning. Though the weather had clouded a bit, no storm appeared likely for some twelve hours. This, at least, was our estimate as we approached the fractured granite and began to climb. On either side of the narrow rib, blue ice covered by a thin veneer of wind-packed powder was uninviting; but, when the rib narrowed and disappeared under this coating, we had no choice.

Better snow seemed to lie on the north side, and we hoped that crampons would help us to cross a rope-length of 45- to 55-degree ice to the top of an ice mass whose bottom hung out over the huge northeast face. Above this point the slope appeared to be slightly less steep. Clifford belayed me as I angled across to the edge of a small schrund, whose lower lip provided a short traverse to hard-packed snow. The angle was steep, and each step was delicate. Fortunately, we found a good belay point at the crevasse and another a rope-length away. Gradually we kicked steps upward, angling around to the north, where better snow seemed to lie. Below us, to the east, we caught glimpses of the site of our high camp on the Yukon Expedition, but the view was quickly blotted out by thickening clouds. Persistence and care finally brought us all to the summit ridge, where, as we had noted on our airplane reconnaissance, a great 40-foot cornice topped the mountain and hung out over the northwest wall. Clouds began to form around us as we happily belayed one another out towards the edge. They were a warning: while we had been engrossed on the northeast side of the summit, the weather to the southwest had been deteriorating. We began the descent without delay.

Half an hour later, at the tricky slope between the small crevasse and the rocks, a furious blast struck us. Screaming wind whipped powder horizontally across the snow, stung our faces, and seemed bent on knocking us from our steps. We were all glad to reach the upper part of our rock rib; but the surfaces had already become glazed, and easy pitches were now slick with verglas. Our axe handles, parkas, mittens and beards quickly iced over, so that the

* Provisional triangulation by Walter A. Wood indicates a height of 14,560 ft.

descent to our snowshoes required constant care. One gust even threw me clear off the rocks onto the adjacent slope; but my axe held, and I was back in a moment.

When we reached the snowshoes, the whole world was white: snow and sky blended. Our only direction markers were the ridge, dropping down below us, and faint snowshoe imprints, rapidly becoming obscured, leading off into the whiteness. In 15 minutes the tracks were completely blotted, and everything about us was white. For a time we kept on, judging our position by the slope of the snow, until that too became deceptive, and we were forced to await a lifting of the clouds! We were warm; but we knew that our tents, with sleeping bags and food, lay annoyingly close at hand. As patiently as we could, we waited until, at a slight lifting of the clouds, we viewed with pleasure our tents only a few hundred yards away.

During the rest of this day and the next two, the storm blew; and on July 31st we awoke to find a pale sun and deep powder snow. Should we wait for the snow to settle or work our way down to the camp below? Engine trouble of the Norsman and recent bad weather had so delayed the work of the expedition that it was important to use every possible day before the end of the season. Our mountaineering objective had been attained, and our equipment tests completed. It was time to go. Although deep snow covered many crevasses, we believed that caution, good rope technique and a total party of four would ensure a safe descent.

The highest of the three icefalls was passed without trouble as we snowshoed ahead through deep powder. Between this icefall and the next, deep powder had drifted across a relatively flat area. Here we stopped for a good breather. Just beyond lay an obvious crevasse, which seemed well bridged. Clifford gave me a tight rope as I started to cross. Probing was impossible, for the surface powder was more than ice-axe deep. Halfway across, I felt the snow drop out from under me, and instinctively threw myself at the far side. My axe went in, did not hold—and I disappeared into the crevasse!

My immediate reaction was annoyance that I had selected a bridge that would not hold. Five feet from the surface the rope checked, and I grabbed it immediately with both hands. Then, to my surprise, it began running free. The side walls shot by me like sidewalks passing a speeding car in a narrow street. Again a jerk

came—violent this time—and I could feel the rope stretch. Immediately my pack was thrown violently over my head. It hung down mainly on my right arm.

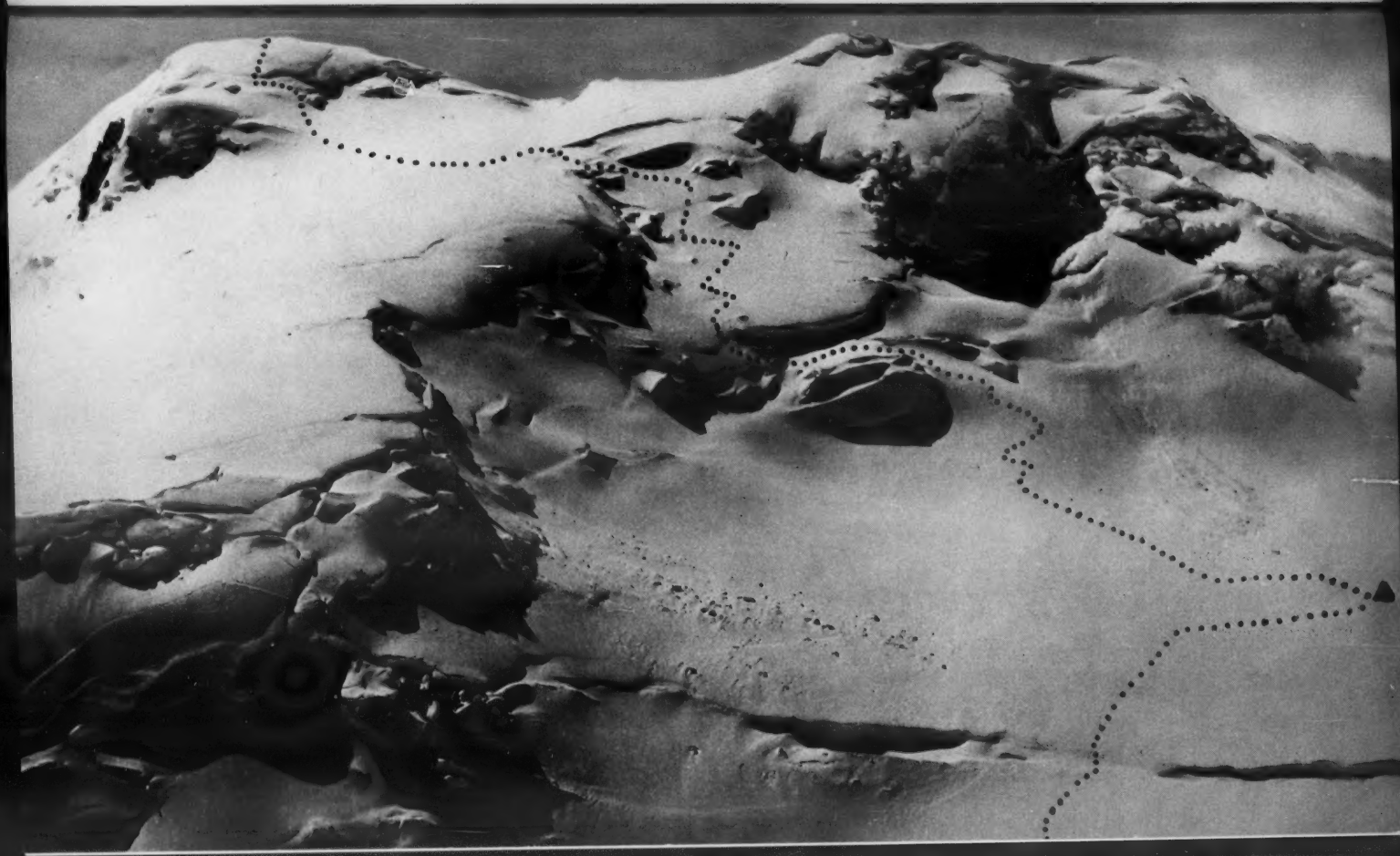
I was hanging free, six feet from either wall of the crevasse and at least 40 feet below the surface, with my head pulled down by the weight of a 60-pound pack. Holding the rope with one hand, but unable to get any other purchase, I struggled to get my pack back into position as I swung free. It was impossible. Since the pack kept my head down, I reluctantly dropped it; it broke through a screen of snow 60 feet down, but I never heard it land! Since the crevasse at the snow layer below me was over six feet wide, the pack probably dropped at least 50 feet farther.

The impetus given by the pack made the rope turn, and I began to go round and round like an apple on a string. As the blue walls rotated, I shut my eyes and held on desperately until the twirling stopped. Then, looking up, I saw that for at least ten feet from the edge of the crevasse down, the rope was tightly wound. For some strange reason, and to my great pleasure, it never did unwind.

Holding the rope above me with one hand, I now pulled out a safety loop from my waist and put a foot in it. Almost at once I heard Walter call down, "Are you all right?" He had seen me fall and had rushed forward. Clifford, carrying a big pack and belaying on snowshoes on unconsolidated powder, had been pulled over on his face by the sudden jerk; and the rope had run out, breaking two of his fingers. Walter had helped him and now began to pay out a rope to me. As he did so, I saw to my disgust that it coiled around my belay rope like a tendril of a vine. By the time it reached me, the ropes were well snagged; but thankfully I set my foot in a loop, put my weight on it, and felt better.

Another rope was lowered, in order that we might use the Bilgeri method of crevasse rescue; but we had not reckoned on the stretch of nylon rope. On my first transfer of weight, the rope elongated so much that I lost four or five feet. The strain on my arms all this time was considerable. We could talk to one another, however; and, as our efforts became better coordinated, the hole above, where I could see blue sky and blowing clouds, began to grow closer. Masterful handling of the rope from above brought me close to the icicles growing on the bottom side of the six-foot-

HIGH CAMP ON HUBBARD AND ROUTE TO SUMMIT
Photo, W. A. Wood



thick bridge. After a rest, we all hauled, and I emerged into the sunlight.

Since I had lost one snowshoe in the crevasse, progress to the camp below was somewhat slower; but the location of the most important of our old route marks brought us to camp without further incident about the middle of the afternoon. That night Walter shared his sleeping bag and air mattress with me, and next day we pushed down to base camp through softening snow.

August 2nd had come, and we were all somewhat disturbed that we had seen no sign of the Norsman since our departure from base camp. Various Air Force planes, flying search patterns, had come over; one had even buzzed our camp. But we had never seen the Norsman. On August 3rd we again saw search planes; and on the 4th, when two more Army planes appeared, we took skis, snowshoes, rope and ration boxes and marked out in the snow the word *N O R S M A N ?* The lower of the two planes, a ski-wheel-equipped Air Rescue C-47, now swung over and dropped a note asking us to mark the temperature, wind direction, altitude and direction of nearest crevasses. A postscript was added: *"Norsman still missing."*

The next minutes, until the C-47 landed down glacier, were terribly long. Immediately we loaded our gear, and after an interminable wait the plane took off for Yakutat. The pilot could tell us only that the Norsman had been missing since July 27th, and that it was believed Foresta and Valerie Wood were aboard. Bob Sharp was helping to direct the search.

When our plane landed at Yakutat, we stepped almost immediately into a waiting B-17, piloted by Major Bradburn, a top-notch officer, and flew back and forth over King's normal route from the Seward Glacier to Yakutat. We found no trace of the missing plane. Some of our searching was at 50 feet, but four-engine bombers are not the best for such close-in search, and a wire was sent to Terris Moore, asking for his help. Dr. Moore, president of the University of Alaska, was just about to leave for Maine; but he cancelled his trip and started at once for Yakutat in his small plane.

Bad weather on the 5th, 6th and 7th now delayed our search, but on the 8th all planes were out. Moore and I flew to the Seward base camp, where the Norsman had taken off, and for a week combed the areas near by that the big Air Force planes could not cover so thoroughly. Every man at the base was determined to

EAST HUBBARD, ALVERSTONE AND HUBBARD FROM NORTHWEST
Photo, W. A. Wood

find the Norsman, and every bit of flyable weather was used. Gradually, however, we began to realize that the Norsman was not sitting somewhere in the open waiting for rescue and minor repairs, and that something sudden and final must have happened. Stein and Bruce-Robertson, the two men at the camp from which the plane departed, had heard the motor for double the normal length of time after the take-off—20 minutes by the clock—and one of the two thought he had then heard a crash. Whether he did we may never know.

Somewhere the deep snows of the St. Elias cover our dear companions, a brave and skillful pilot and two generous, courageous and very lovely ladies. The majestic peaks of this wild and beautiful area mark well their last resting place.

Ave atque vale.

First Ascent of Mount Hess

Alston Paige

MOUNT Hess is one of the four highest mountains in the Hayes Range as seen from Fairbanks, Alaska. Mount Hess (12,030 ft.) and Mount Deborah (12,540 ft.), together, are known as the Cathedral Peaks. From Fairbanks, they appear identical in silhouette. No recorded climbing had been done on either peak before 1949. In the spring of that year, a party of five students from the University of Alaska attempted Mount Hess. They tried a ridge on the east face of the mountain, hoping to gain a large cirque and then climb to the summit. Because they encountered rock pinnacles which they could not climb, they were unsuccessful in this first attempt. Another attempt, by two members of the original party, was made in September of the same year; it was stopped by rock, on the same route. In the spring of 1950, two other students from the University of Alaska tried the northwest side of the mountain; they, too, were turned back by unclimbable rock.

In 1951 the enterprise was undertaken anew by a party of five: Dick Holdren, Elton Thayer, Ed Huizer, Howard Bowman and me. I had shared in the first attempt and, since it failed, had been planning a return trip for quite some time. On May 17th we were flown in to a mining-camp air strip on Portage Creek, a tributary of the west fork of the Little Delta River. The distance from the strip to the base of Mount Hess is about 35 miles. It took us two full days of walking. We arrived at the glacier late on the second day and proceeded to set up our base camp. Scarcely had we established it before the weather closed in. For two days we had to wait out a raging blizzard.

The morning of the third day was clear, and we started to prepare for the climb. In order to gain the benefit of frozen snow and to minimize the danger from avalanches, we planned to climb at night. During the afternoon, therefore, we made only a short reconnaissance trip to the icefalls. We climbed part way up them and found the ice quite firm. Between Mount Hess and Mount Deborah is a giant headwall of jumbled and broken ice. This mass is broken slightly by a bench and then falls in a fantastic maze of

ice blocks and avalanche débris, much like a frozen waterfall. About halfway up Mount Hess, a small glacier—very narrow and steep, like a trough set against the side of the mountain—comes into this mass at a right angle. Our projected route lay up this ice mass, into the saddle between the main mountain mass and the summit peak, and thence to the summit.

We left our base camp again at midnight. At the start the going was very steep and treacherous. We crossed innumerable crevasses and squeezed between massive blocks of ice. Many times we moved over fresh avalanche débris and climbed slopes that made us think of potential danger. As we climbed steadily upward, the route through the icefalls kept opening before us. We climbed over and through many unusual breaks in the ice blocks and at last—amazingly enough, without having had to retrace our steps even once—found ourselves at the top of the icefalls.

Being now under the massive and dangerous headwall between Hess and Deborah, we wasted no time before proceeding up the trough toward Hess. At noon we stopped for lunch and decided to leave our packs about halfway up the trough and make a dash for the summit. The trough received a great deal of avalanche débris, and fresh ice was breaking off almost continuously. From the spot where we lunched, the route to the saddle appeared impossible; but we were able, as we ascended the trough, to pick out a way through the masses of hanging ice and snow. The first part of the approach to the saddle was over very steep, nearly solid ice. As we gained altitude, the snow deepened and became very soft and heavy—perfect for avalanching. In several places large amounts of surface snow broke and slid, without ever quite gaining avalanche proportions. Near the saddle a large crevasse almost stopped us, but we were able to go around the worst part of it and cross a snow bridge.

Upon reaching the saddle, we saw just one obstacle ahead: a large bergschrund that traversed the entire face of the summit peak. It appeared quite formidable, as did the steep slope (about 58-60 degrees); but we kept climbing. We reached the schrund after an exhausting uphill pull through deep, heavy snow. One attempt to cross it failed—and nearly resulted in a bad fall. We traversed the face, tried the other end of the gigantic crack, and successfully crossed. Continuing the climb, we found ourselves on snow that broke and settled with a dull crunch. Why it did not go, I can not

say. Probably we were just lucky. As we approached the summit, we came to solider snow and, about 30 feet from the top, to ice. At 8.15 P.M. on May 24th, after 18 hours of continuous climbing, we stood on the summit of Mount Hess.

The view from the summit was magnificent beyond description. The vastness of the country and the majestic splendor of the mountains make a sight to humble any man. After taking several photographs, we began the descent, which soon proved to be the worst part of the trip. For safety's sake, we decided to rope five men together and take good belays on some of the more treacherous parts. It was slow and difficult work, for we were extremely tired and cold. Once at the saddle, however, we were able to increase our speed; and soon we were down in the trough, heading for our final camp. We were roped in this order: Holdren in the lead, Thayer, Huizer, Bowman, Paige. Suddenly Holdren disappeared. Thayer immediately took a belay, diving on his ice-axe in the snow. I waited until the next man had secured a belay and then moved around to Thayer. Our shouts to Holdren, in the crevasse, went unanswered. Pulling on the rope between Holdren and Thayer, I found it slack—a discovery which gave us a real scare. Then I crawled to the edge of the crevasse and looked in. It was about four feet wide, and there was a narrow finger of ice extending from one wall to the other. On this finger of ice sat Dick Holdren, looking disgusted with himself for having slipped in. If he had not landed on the finger of ice, there might have been a bad fall for several of the party, for we were going downhill at a very steep angle. Extremely tired and cold, we came to the spot where we had left our packs. We had been 26 hours on the climb. We spent an hour setting up camp and brewing tea and then crawled into our sleeping bags.

When we crawled out again, about noon the next day, we were very stiff and sore, but after a hearty meal we felt better. We devoted the rest of the afternoon to basking in the sun and eating some more. At about 6.00 P.M., since the temperature had dropped enough to freeze the snow, we resumed the descent. After half an hour or so, Thayer shouted down that we should secure ourselves and hold tight. We heard a tremendous rumble, followed by a wind of hurricane velocity. Then we were subjected to a shower of pulverized ice and snow thicker than any blizzard we had ever seen. A great avalanche had completely obliterated a spot where we had

stopped some 20 minutes before to adjust our crampons. We hurried to get off the mountain. All the way down the icefalls, we were amazed to see what we had ascended. At 11.30 P.M. we were off the mountain—as happy to be still alive as to have attained the summit.

The next day we remained at our base camp, resting and preparing to cache our surplus food for the next climb in that section of the country. Early on May 27th we started for Portage Creek. Halfway down the glacier, we heard an airplane. It was Dr. Terris Moore, president of the University of Alaska. He landed his ski-equipped Super Cub on the glacier and talked with us for a while. After he took off to return to Fairbanks, we continued our walk out. It was raining when we arrived at the place where we had intended to camp. As we were travelling light, without equipment for camping in the rain, we decided to go right on to Portage Creek. Early the next morning we reached the cabin there, having covered in one long day what had taken two days of hard walking on the way in. We had six days before the airplane was to come for us; we spent them hiking around the country, photographing the wild game and enjoying ourselves in general. When we arrived in Fairbanks, we had a fine steak dinner together before splitting up to work at our various jobs during the summer.

MOUNT HAYES FROM THE NORTH
Photo, Terris Moore

Climbs from the Klutlan, 1951

Alfred W. Baxter

THE Stanford Klutlan Expedition represented an extension to Alaskan terrain of mountaineering doctrine and practice developed on the Sierra Club Expeditions to the Coast Range of British Columbia in 1947 and 1950 and of extensive ski-mountaineering in the Sierra Nevada over the years. The packaging experience gained in the Tiedemann and Tellot air drops was particularly valuable.

Our original party of six was reduced to four climbers by last-minute defections. On 21 June 1951 Fritz Lippmann, Jon Lindbergh, Rupert Gates and Alfred Baxter left San Francisco in a three-quarter ton Ford truck. In Dawson Creek, B.C., Lippmann underwent an emergency operation for appendicitis. Confident that he could find another climber from the States to accompany him later, the remaining three of us finished the trip to Whitehorse, where we loaded our 1800 pounds of supplies into a C-47 from the Tenth Search and Rescue Squadron in Fairbanks.

On July 5th we had the magnificent experience of flying roughly parallel to the main crest of the northern St. Elias Range, past Steele, Lucania, Wood and the rest, before our plane turned south to follow the course of the Klutlan Glacier. From Air Force trimetragon photographs and from the Boundary Commission maps, we could identify summits in the beautiful Natazhat Range, Mount Wood, and the unknown welter of peaks between Mount Bear (14,850 ft.) and Mount Bona (16,420 ft.) Our pilot dropped down through sparse clouds, and in less than a half-hour our air drop had been made, parallel to a medial moraine on the Klutlan Glacier, at the spot where the surveyed area ends and where the glacier divides into three large branches.

Later that afternoon we landed at Snag, an RCAF emergency air strip and weather station. Here we enjoyed more of the magnificent hospitality and kindness that were our lot while we were in Canada. A huge high tea followed by an even higher dinner prepared us for the truck ride back to the Alcan Highway and down to the White River Bridge. At this point, at 7.15 P.M. on

NATAZHAT RANGE FROM HIGH CAMP ON MOUNT BEAR
Directly in front of Mount Natazhat rises Mount Riggs, named for the late Thomas Riggs, Chief of the U.S. Section of the International Boundary Survey and Honorary Member of the A.A.C.
MOUNTS JOHN HOOD, PUNDT AND NATAZHAT FROM BASE CAMP

July 5th, we started our backpacking journey into the Klutlan to recover our air drop.

The Yukon-Alaska bush was all we had anticipated and more. We could appreciate the work of Bates and Washburn on their trek from Mount Steele to Burwash Landing. Our route followed the east bank of the White River, sometimes on easy gravel bars but more often on the cut banks, muskeg swamps and dead falls well above the river itself. Since we could not cross the White or its principal tributary, the short Klutlan, we were forced to move up and across the vast moraine until we could gain the west bank of the Klutlan Glacier and join the route used by the survey parties in 1914.

After a hot, hard day getting over a steep pass to shortcut the right-angle bend in the glacier, we reached a series of terraces formed by old ablation valleys left high and dry by the shrinking ice stream. Three days of this kind of going brought us to the relatively smooth ice of the upper Klutlan. We reached our drop zone in a light rain on the tenth day after our departure from the highway. The boxes of food were rather welcome, since we had been on lean rations for three days and had finished the last oatmeal that morning.

July 14th and 15th we spent in setting up base camp, sorting our equipment and gorging ourselves. Our headquarters at 7000 feet was idyllic. Near-by moraine and surface streams provided sanitary plumbing facilities. The serrated Natazhat Range formed a wall to our northwest; and the three peaks of Bear, Jordan and Bona filled the heads of the three glaciers that joined beneath us to form the main Klutlan.

Our first trip was up the Bear Glacier, about one and one-half miles wide and 20 miles long, that led southeast to the Bear massif. Our experiment with man-hauling of equipment on a small toboggan was a failure, so we ended up with good-sized packs in establishing our series of four camps toward the summit of Bear. Our route followed the Bear Glacier to a point some nine miles and 1500 feet above our 7000-foot base camp. At this point we established an advance base camp (Camp II), well-stocked with food and gear against the possibility of one of the famous St. Elias storms. The weather, however, held warm and bright; and we pushed a third camp up to a small, flat area below a huge icefall on Gateway

Glacier. The next day we gained some more cheap altitude by a long detour up the eastern branch of Gateway Glacier. This route led eventually to a terrace between two icefalls, at about 13,000 feet on the vast northern slopes of Mount Bear.

Our summit climb was strenuous rather than technically difficult—a very satisfactory condition for a party of three. We gained the long summit ridge at about 14,200 feet and had a truly awesome view of St. Elias, Logan, Bona, Lucania, Wood and the vast tangle of great peaks to our east, south and west. The air was still; only a few clouds below us, at 11,000 feet, marred a perfect day. The tarp provided more than two quarts of melt-water lemonade to wash down lunch, and the sun's warmth allowed us to climb bare-handed and without parkas along the three-mile ridge to the series of bumps that form the summit. On the most southwesterly mound, which we judged to be the highest point, we spent a fine hour taking pictures, eating raw smoked fish and generally congratulating ourselves. Then, at 5.00 P.M., we waded down the soft snow to our high camp. That night we enjoyed the prolonged alpine glow that is such a wonderful feature of the sub-arctic twilight.

Four days and an abortive side trip later, we were back in base camp in time to light flares and wave at the USAF B-17 that buzzed our camp in the course of a search mission. Our ground-air panel signal of "All's well" was received and forwarded to Whitehorse, where Lippmann was sweating out the arrival of Richard McGowan, of the Seattle Mountaineers, who planned to join Fritz for a trip in to our base camp.

After four days of repairing equipment and feeding, we undertook our next trip—up the southwestern branch of the Klutlan toward the eastern icefalls of Mount Bona. As on the Bear trip, the glacier surface between 7500 and 11,000 feet was wet, soft and almost bottomless.[1] Even with bear-paw snowshoes, we sank in to the hips through the rotten surface. The prolonged good weather never allowed the melting snow cover to crust over at night. Again, we established three camps.

[1] Below 7500 feet the glacier was bare, water-channeled ice. Between 7500 and 11,000 feet the snow cover was wet, soft and deep. Above 11,000 feet the snow was dry, soft and deep. Such is the generalization on snow conditions during the summer. The weather was almost incredible. We had only six days of snow or rain out of the 53 days we were away from the highway. The temperatures were always mild, and the wind never a problem.

Our second camp on Mount Bona was about two miles below Klutlan Col and directly below our route on the great east face. The only problems we met in establishing our high camp at 14,000 feet were soft snow and a few unwholesome snow bridges. On the first night at high camp, we had one of the finest views of our lives. Our four-man GI mountain tent faced northeast. From our sleeping bags we could see again the array of peaks from Natazhat past Wood and Lucania to Logan and St. Elias. With a perfectly clear sky, the drawn-out alpine glow on these great summits made all the effort of the preceding weeks a small price for the glory that was then ours.

The summit climb was somewhat more interesting than the one of Bear. We all broke our previous altitude records in crossing the two-mile plateau that separates the true 16,420-foot south summit from the smaller 15,600-foot north summit. The steep, wind-slab conditions between 15,300 and 16,000 feet required care and crampons both up and down. The actual summit, visited from the northwest by Moore and Carpé in 1931, was sunk in two feet of unconsolidated snow and poised above a south face that must rise at least 10,000 feet above an unnamed tributary of the Barnard Glacier flowing to the Chitina Valley to the south.[2]

Again our summit weather was perfect for photography and lunching. We spent an hour eating and looking at the amazing summits to the south and southwest of Bona. The southernmost satellite of Bona appears on the Boundary Commission map as Peak 15,100. This is probably one of the most beautiful and inaccessible peaks in North America. It is separated from the main mass of Bona by a deep col, a 14,800-foot knife-edged peak, another sharp dip in the ridge, and a final steep ice ridge, corniced and fluted. We tentatively named this peak Mount Carpé; but subsequent communications with Terris Moore revealed that he had named the mountain University Peak, after the University of Alaska. The southwestern satellite peak of Bona put us in mind of the Twa Harpies. The peak must rise to about 15,500 feet. It has two sharp, ice-sheathed summits separated by the small catchment field for a steep hanging glacier that drops off northeast toward Bona. Dr. Moore plans to name these twin summits after the first president of the University

[2] See the photograph by Bradford Washburn, "Mt. Bona across Barnard Glacier," *A.A.J.*, V (1944), following p. 202.

of Alaska. These two members of the Bona family will provide significant mountaineering for a party willing to approach their bases from the McCarthy-Chitina or McCarthy-Russell Glacier routes.

After a plod back down to our high camp and a night's rest, Lindbergh and Gates went back up the snowshoe tracks to the plateau and climbed the twin summits of the north peak of Mount Bona by the steep east ridge. This trip provided another first ascent, some good Kodachromes, and a pre-lunch warm-up. When this excursion was over, we hurried back down to the site of our second camp at 11,000 feet.

The next day we walked up the Klutlan Col between Mounts Bona and Tressider. This corniced col divides the Yukon from the Chitina River systems and forms the head of the Klutlan Glacier. The nomenclature is somewhat arbitrary, since the main stream of the Klutlan divides into three branches of which any one could be considered the continuation of the main glacier. Since none of the upper reaches of the Klutlan system is mapped, our nomenclature seems to have at least the merit of simplicity. The branch of the Klutlan that flows northwest from Mount Bear, we named the Bear Glacier. The central branch, flowing north-northeast, we named the Jordan Glacier, from the highest peak at its head. The branch descending from the southwest, fed principally from the north and east faces of Bona, we regard as the upper Klutlan. This would give the Klutlan a length of approximately 55 miles from moraine to Klutlan Col.

From the crest of Klutlan Col, we had views of the huge drop-off so characteristic of the Chitina side of the watershed. Whereas gradual glaciers flow to the north, the south face of the Col is sheer for at least 4000 feet. The peaks that fringe this impressive cirque drop off as much as 8000 feet. Peak 15,100, its neighbor, Peak 14,800, and Mount Tressider, which forms the eastern wall above the saddle, all have spectacular cliffs that drop at very high angles into the unnamed glacier that soon joins the Barnard.[3]

Leaving the col at midday, we returned to Camp II, struck the tent, and moved on back to the fleshpots of base camp. After nine miles of soft snow, Baxter's blisters demanded respite. Gates and

[3] Upper left-hand corner of photograph cited in n. 2.

Lindbergh pushed restlessly on, arriving at base camp about midnight. Baxter got back to the bacon and hot cakes the next morning, after a restful night below the avalanching slopes of Mount Jordan. Since we had planned our food supply for four men, we still had lots of curry powder, Demerara rum, instant potatoes and Jello in our base camp larder.

After a day's rest, Lindbergh and Gates loaded up and spent three days climbing Mount Jordan (about 13,600 ft.). Just before and during the first real snowstorm of the summer, they got the peak, via a rather complicated series of icefalls leading to the steep 1000-foot east ridge. This peak was undoubtedly the most difficult of the four climbed during the trip. Many of the lesser peaks in the area would be first-rate objectives if they were anywhere else. Dwarfed as they are by such huge snow heaps as Bona, Bear, Wood and Lucania, their stature is insignificant and their attraction somewhat dulled.

Our cumulative enthusiasm was great enough to make us plan one more ascent. The beautiful twin summit of Natazhat, claimed by members of the 1914 survey party, had long fascinated us. Beautiful from all angles and set at the culmination of a long ridge of shapely summits, it would have been a fine climax for the summer. As it turned out, Gates and Baxter started down the glacier with a loaded toboggan, while Lindbergh was indisposed in camp. In getting a load across an ice bridge, Baxter put a leg through, sprawled flat, dropped the hauling line, and watched the sled rip from Gates' grasp and drop into the depths of the crevasse. It was well below the reach of our nylon rope and for practical purposes gone forever. This loss of equipment, together with disintegrating weather, made the delights of Whitehorse seem irresistible.

At 10.30 A.M. on August 18th, just 35 days after our arrival on the glacier, we loaded up, Lindbergh with nearly 100 pounds, and started off for the White River, via Giffin Pass and the Giffin Glacier. This route was used by the 1914 survey party, so we knew that it would go. The south side of Giffin Pass is gradual ice, covered with marble-like bits of pumice stone. Walking up through such a cover is much like wading through minute ball bearings piled on an inclined sheet of glass. The north side of the pass drops quite abruptly for 1500 feet to the head of the eastern bay of the Giffin Glacier. The bare ice made good going for a while, but then gave way to the more

usual loose moraine threaded with many surface streams of considerable size. Along an ablation shelf above the east side of the glacier, we found evidence of the pack-train used by the survey party. We were continually impressed by the deeds of the men of old in getting horses in to such places.

That night brought us to the first low scrub we had seen for five weeks. A cooking fire and a larger "cheerful" fire were set going, and the backpack dinner of chipped beef and quick rice was soon ready. On August 19th we covered the remaining eleven miles to the White River, following the flat boulder bars along Holmes Creek. At the river we spent a day gathering drift logs and lashing them twelve wide into a raft. Blisters, bushes and packs made water transport seem highly desirable. Lindbergh's experiences in rafting the Colorado and San Juan Rivers qualified him to captain the raft *Bona*. We thought it not inappropriate to name our craft after a mountain which had been named by the Duke of the Abruzzi for his private yacht, the *Bona*.

After escaping submerged rocks, whirlpools, cliffs and rapids for seven hours, we were defeated by a large whirlpool in the upper canyon of the White River. None of our efforts could return us to the main channel, so we made the rocky beach, camped in wet sleeping bags, and next morning dismantled the raft and relayed our supplies and ropes around the gorge to Canyon City. This collection of six crumbling cabins was the headquarters of the International Boundary Commission survey party in their 1914 operations. We made use of rusted saws and axes to fashion a new raft, the *Rose*. After pausing to wonder at the skill of our predecessors in cabin-building and horse-packing, we continued our voyage by raft down the White River. Rain and a high wind made the next day unpleasant. We all succumbed to "rafter's foot," a peculiar numbness from the shins down, caused by prolonged immersion in cold water. Its most distressing symptoms can be averted by the riveting of attention on the bushes along the river bank, which pass by at about nine miles an hour.

The second day below Canyon City, the seventh since our departure from base camp, we spent floating down the now uneventful channel, past the bushy scenes of our earlier struggles. We grounded the *Rose* below the steel span of the White River Bridge and got rides from passing tourists. During the rest of the day, we caught

up on recent developments in the world outside. Our often-broken watches, we found, were within 16 minutes of the correct time.

Supplements

1. Air-drop packing

Our food and equipment were packed in dry-ice containers. These cubic-foot boxes are of three concentric layers of corrugated cardboard, well-stapled at the flaps. After loading, we banded each box with steel banding tape. Of 30 such boxes, loaded with between 14 and 43 pounds, only two broke open on impact. We decided that this breakage on impact after the free drop was the result not of weight but of landing on a corner. We lost only five pounds of sugar and a few sacks of peanuts from water soakage. The food remained on the soggy glacier surface for ten days; and what small damage occurred was due to water soakage, not to damage or loss.

Our gasoline was packed in two ways:

(a) Three and one-half gallons in a large (14″ x 36″) vinyl plastic water bag. The bag was enclosed in three concentric cardboard boxes, with layers of crushed newspaper between them. The whole load was dropped on a 12-foot cargo chute from about 400 feet and came through without leakage.

(b) Quantities between one pint and half a gallon in smaller plastic water bags carefully sealed. These were packed in separate boxes padded with newspaper. Of eleven such bags, only three were unbroken when we arrived. We were satisfied with our tests of these bags—both for their characteristics on impact and for the physical changes due to contact with gasoline. But apparently gasoline loosened the glue along the seams of the eight broken bags. Why this did not occur in our tests or with the other three bags, we do not know.

The skill and enthusiasm of the members of the crew of the C-47 were of inestimable value to our expedition. The free drop from 100 feet in five passes left 52 boxes and sacks in a pattern 30 yards wide and only 150 yards long. Such a small pattern made location and collection of the loads an easy task.

2. Willow wands

Rather than carry the heavy dowels used by other climbing parties in Alaska, we experimented with three- and four-foot bamboo garden

stakes. These are cheap ($3.00 a hundred) and light in weight, and they come already stained a dark green that is quite visible against the snow. We followed the usual procedure of placing the wands a rope-length apart, with two on the upper and one on the lower lip of a crevasse or snow bridge. The unusually good weather made them unnecessary, but such good fortune can not be assumed in advance.

*3. Nomenclature**

Mounts Jordan, Tressider, Wilbur and Branner are named after past presidents of Stanford University. Mount John Hood is named after a Stanford mountaineer killed on a practice climb in 1947. Mount Pundt is named after Rolf Pundt, killed on Bugaboo Spire in the lightning accident of 1948.

Survey Pass we named after the men of the survey party of 1914. Giffin Pass is of course named after the glacier at its northern base.

Gateway Glacier is a branch of the Bear Glacier leading up to the north face of Mount Bear. Divide Glacier is the southern branch of the Bear Glacier and leads to a broad col on the divide between the Bear and Barnard Glaciers. Jordan Glacier flows north from Mount Jordan and the peaks of the watershed east of that peak. It is the central branch of the dividing Klutlan.

4. Acknowledgments

We wish to express our thanks to the many people who contributed to the success of the trip. In particular, we are grateful to Fritz Lippmann, who was responsible for most of the food planning; to Edward Shapiro, whose help and advice on trucks smoothed out many of our transport problems; to Einar Nilsson, who placed his Alaskan mountaineering experience at our disposal; to the officers and men of the Royal Canadian Air Force Base at Whitehorse, for their hospitality and help; and to the members of the Tenth Search and Rescue Squadron, USAF, for their skillful cooperation in our supply drop.

* The following place-name designations are unofficial—*Ed.*

West of the Divide

STERLING B. HENDRICKS AND GEORGE I. BELL

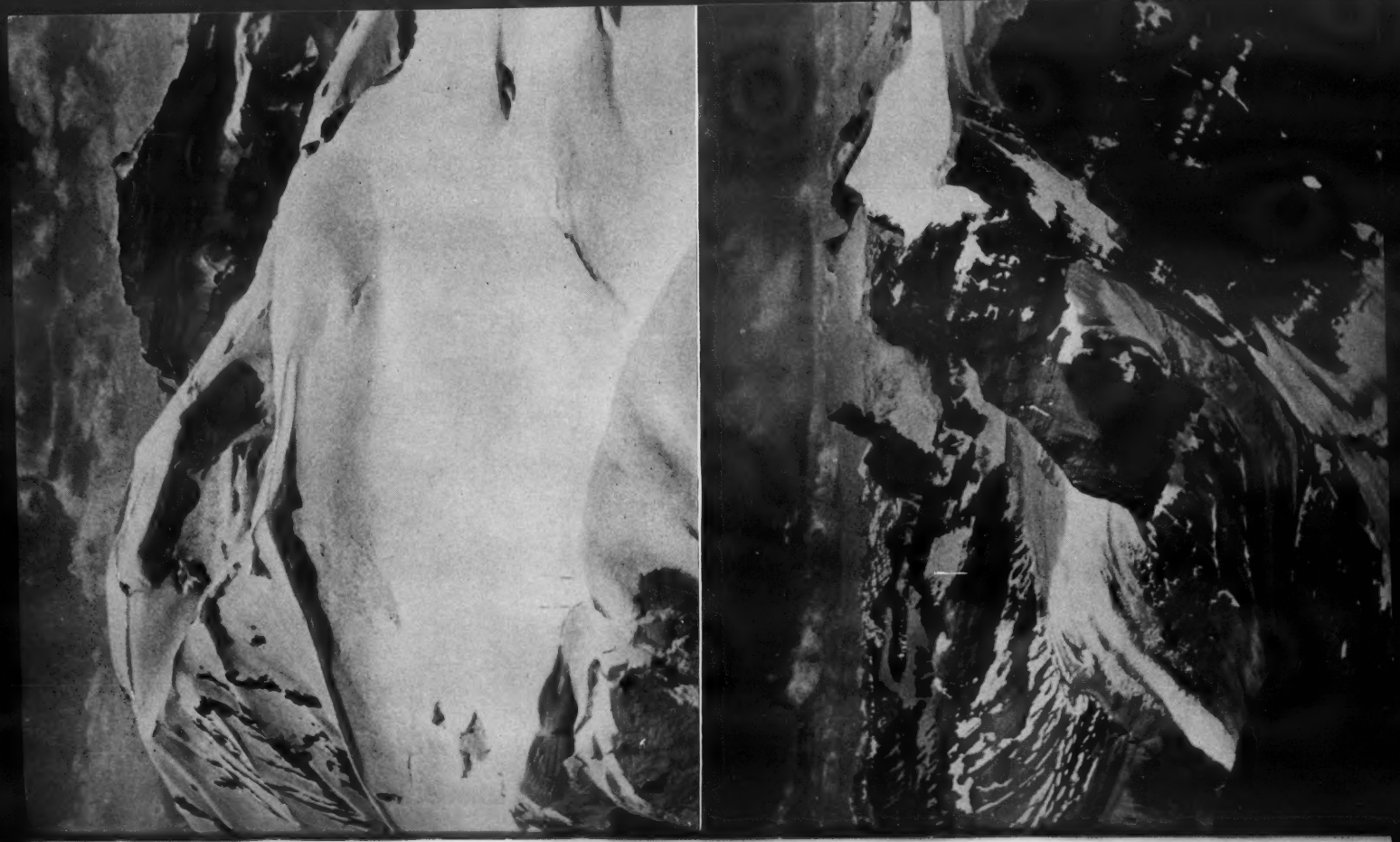
I

IN the Canadian Rockies west of the Continental Divide, between Howse and Fortress Passes, there is a pure wilderness which, being difficult of access and rich in unclimbed peaks, offers a great challenge to the mountaineer. An even dozen of us accepted the challenge and set about planning a summer's outing for 1951. There were to be two parties, one starting from Fortress Lake for the Clemenceau region and the other travelling northwestward from Glacier Lake. Transport and provisioning would be affected by air from Kinbasket Lake. Four flights would be required, with supply drops on the Clemenceau Ice Field and on snow slopes west of Mount Alexandra.

We had to wait out a spell of bad weather at the mosquito-free(!) camp at the mouth of Tsar Creek. Thereafter, plans worked out smoothly. The six of us in the southern group—Ed Camack, Sterling Hendricks, Don Hubbard, Alvin Peterson, John Smith and Arnold Wexler—saw the four members of the northern party[1] on their way before heading for Glacier Lake. The trip in the DeHavilland Beaver was worth the planning, the wait for clear weather and the little money. On the supply flight to Mount Alexandra, I was the pusher, packed in behind the baggage; up front were Andy Kauffman (one of the original dozen, but now a supercargo) and Alvin Peterson. We took off southward up the Columbia and started climbing to 10,000 feet. The northern Selkirks were spread out to the west, with the Adamant Group dominating the scene. Then we headed up the Bush, where Stutfield and Collie spent the summer of 1900 in a futile attempt to reach the higher mountains. In a few minutes we had passed Bush Mountain (10,770 ft.) and started up Lyell Brook, flying even with the white summit of unclimbed Icefall Peak (10,420 ft.). Then I performed my task of throwing out the provisions; and, after a swing around the upper end of the valley, we flew over the Lyell Ice Field toward Glacier Lake, buzzing the southeast icefall on the way. As Pete and I stood beside the lake

[1] See pp. 253-60 below.

MOUNT COCKSCOMB LOOMING BEHIND MOUNT WHITEROSE
THE LYELL MASSIF FROM MOUNT SPRING RICE
Photos, A. Wexler



(4700 ft.), watching the plane take off on the return flight for the rest of the party, we felt that an hour could not have held more, and that the wilderness was without limit.

With food for three days and hopes for fair weather, we started late in the afternoon toward a camp at the head of the valley. Early the next afternoon, well up in the Lyell Ice Field (9800 ft.), we deposited the baggage before starting for Lyell 2 (11,495 ft.). On top, after Clemenceau (our objective) had been pointed out on the distant horizon, beyond vast rows of other peaks, Ed looked rather dubious.

A mild night softened the snow field and slowed our travel westward and then northward between Lyell 5 (11,150 ft.) and Mount Lens (10,160 ft.). Here the unclimbed group of mountains along the ridge leading westward to Bush Peak was within striking distance, and Mount Arras (10,180 ft.) stood out across Icefall Brook; but these we had to forego. The way to Lyell Brook was supposed to follow down a smooth glacier seen from the plane. Such was the excitement of the ride, however, that some confusion resulted: the glacier turned out to be a couple of ridges away, and our passage was soon blocked by cliffs and icefalls. We spent an afternoon of mountaineering, ending in a struggle with a box canyon, before we made camp on a flat of great beauty in the aspens beside the brook 5000 feet below the ice field.

Thence the main tributary stream from the north led, through some mild bush, to the lily-covered alps below the air drop. Having made another camp, we set out to recover the packages, strewn over a course of several miles. What had taken a minute in the plane took now hours on foot. Mounts Douai (10,230 ft.) and Oppy (10,940 ft.) were climbed from this camp. A cliff band was passed, and then a long snow slope led steeply to the crest of the divide between the two. We turned northward to Douai, which lies close under the higher summit of Mount Alexandra (11,214 ft.). A 25-foot chimney in the principal cliff band forming the summit gave the only trouble. By roping-off on the return, we avoided this and saved time in our travel southward to Oppy. The walking was so easy that caution was thrown to the winds—which were blowing quite a bit by then. Near the summit I supplied additional evidence that the simplest places are the most dangerous by breaking through a two-foot cornice and tumbling downward toward the scenery of the upper Alexandra

MOUNT SHACKLETON FROM THE NORTH
Route was up right-hand ridge

Photo, G. I. Bell

Valley. I brought up on the rope, firmly held by both Arnold and Ed. The return from the summit to camp, down a ridge to the west and a steep couloir, took only two hours.

The main climbing camp was to be at the head of South Spring Rice Brook, on the meadows which are across a 9200-foot col immediately to the west of Mount Alexandra. In broken weather we packed all the baggage and headed across. Most of the day was spent in a struggle with the great icefall above the meadows. We made camp at the edge of timber on the rim of the canyon, where the stream leaps to the lower valley. Possibly three groups have hurried past this spot to the mountain beyond, and each was enthralled by the scene. They could not guess the even greater beauty of the alps to the west, where one can see the full thousand feet of the tumbling stream.

Climbs were made on Mounts Alexandra (11,214 ft.), Spring Rice (10,745 ft.) and Queant (10,200 ft.), by routes which had been followed before. Then, on an off-day, Ed, Don and I set out at 9.00 A.M. to find an approach to Mount Cockscomb (about 10,500 ft.), which seemed hopelessly far away to the west, in the angle between Lyell Brook and Bush River. We travelled rapidly northward over the alps to the west of Spring Rice Brook and then headed up a flat glacier to a low divide. A 700-foot scramble led to the glacier at the base of the peak north of Cockscomb. Starting up, we became involved in a system of crevasses which required an hour of ice work. Finally, we reached the divide over into Bush River and found a ledge leading southward on the west side. This connected with the col below Cockscomb, where at 2.30 P.M. we stopped for a bite to eat and a talk about our intentions. The discussion centered on the nature of a yellow cliff band and the stability of the snow which was avalanching from the ridge. The band afforded a couple of climbing pitches; the snow was pretty thin over ice. Below the summit a ten-foot cornice had to be negotiated. At 6.00 P.M. we stood on the top, looking across the Bush to "Goat Mountain," where Stutfield and Collie had turned back 50 years earlier from their attempt to reach Mount Columbia. Then came the rush downward. Darkness overtook us on the climb to the divide leading over Spring Rice Brook. But travel in the half-light, down the glacier and over the alps, brought us easily to camp at 1.00 A.M.

Since this part of the country was now about climbed out, we

started north, with six days' provisions, intending to reach the air drop south of Shackleton on the Clemenceau Ice Field. Bad weather set in; and four days later, two days behind schedule, we arrived at the base of Columbia on the Ice Field. The only feasible route to the King Edward Glaciers dropped down to timber—so, with time and provisions running short, we decided to call it a summer. Having waited a day for the summit of Mount Columbia (12,294 ft.) to clear, we climbed the south ridge in early morning and then retreated to the highway at the foot of Athabaska Glacier, passing a sign on the way: "Travel on the Glacier is dangerous. Do so at your own risk."

The northern group carried out their plans in the Clemenceau region and joined our route on the way out by climbing Columbia from the west. Ed Camack led an H.M.C. group up Middle River from Kinbasket Lake to the base of Shackleton Glacier. Although no one made all the trip, the routes were proved throughout for someone else to follow. Given two months and correct supplies, one could travel on foot from Kinbasket Lake to the Yoho Valley. The distances are great; a choice would have to be made between high travel and climbing. The best untouched climbs are (1) between Sullivan and Bush Rivers, (2) on the ridge leading from the Lyell Ice Field westward to Bush Mountain, and (3) in the region of Mount Mummery, south of the Freshfield Group.

S.B.H.

II

Twenty miles west and a little north of Mount Columbia in the central Canadian Rockies lies the Clemenceau Ice Field. For the most part, this is a relatively uninteresting collection of dying glaciers; but, between the higher valleys in which the glaciers are dying, impressive mountains remain. The principal valleys are at 4000-5000 feet; the Ice Field averages about 8000-9000 feet; the highest peak, Mount Clemenceau itself, rises to 12,000 feet. Although the mountains are attractive, they are hard to reach and have been seldom visited by climbers. Ostheimer and Fuhrer made a remarkable number of climbs around the Ice Field in 1927, and Henry Hall and Sterling Hendricks have had parties in the area.

Some time ago, Andy Kauffman conceived the idea of a trip

to the Ice Field with aerial support to simplify the transport of supplies. His plan was to have the plane drop supplies on the center of the Ice Field and deposit personnel at Fortress Lake, whence (according to Sterling Hendricks) the drop area could be reached in a day and a half. Summits ranking high on the "most attractive" list would be Clemenceau, fourth highest in the Rockies, and the then virgin south peak of Shackleton (10,800 ft.).

Early in the afternoon of 9 July 1951, having experienced surprisingly little of the confusion associated with an air drop, our party found itself deposited on the eastern shore of Fortress Lake. Four of us waved farewell to the DeHavilland Beaver as it left to take care of Sterling Hendricks and his party and then, as the disgusted pilot put it, to "get the hell back to civilization." To the great disappointment of all, Andy and Betty Kauffman were not among the four. At the last moment, on the very shores of Kinbasket Lake, they had found themselves unable to make the trip. We four emigrants from civilization, then, were Graham Matthews, David Michael (alias "Georgia"), John Rodney Rousson (a member of the Alpine Club, London) and myself.

Turning our backs on the charms of Fortress Lake, we spent the rest of the day trudging, for the most part, up easy gravel flats to camp in a meadow just below the snout of West Chaba Glacier. The next day proved to be the most arduous of the trip. It began with a 5000-foot ascent to the col (9600 ft.) between Mounts Amundsen and Brouillard which separates the West Chaba and Perry Glaciers. From this lovely snow col we had our first view of the highly interesting north face of Clemenceau. We then traversed the Perry Glacier, descended more than 2000 feet to the Younghusband Glacier, crossed it and climbed a short distance to the ridge separating the Younghusband and Clemenceau Glaciers.

Georgia and I now ascended the Clemenceau for about 2000 feet (three miles) to visit the drop area and bring down some food. There was some doubt that the pilot's idea of the drop area coincided exactly with ours. That it did not had become painfully obvious by the time light failed us at 10.30 P.M. We wandered back down to the ridge and spent the night catnapping in odd bushes and small pine trees. Dawn found four disgruntled climbers wondering whether air drops ever came off as planned—but glorious evening rang with our exultant shouts as we uncovered one grubby gunny

sack after another. Blessed now with provisions in plenty—rations, indeed, for six—we four gorged and sunned ourselves. Our camp was near a minute spring just behind the eastern lateral moraine of the Clemenceau Glacier; and it boasted a fine view of the east face of Mount Clemenceau and the north faces of Tusk Peak, Mount Duplicate and Mount Shackleton.

By July 14th Georgia and I felt ambitious enough to get up at the unreasonable hour of 6.30 A.M. and start for Shackleton. In an hour we had crossed the Clemenceau Glacier and reached the base of a formidable icefall which fills the gap between Duplicate and Tusk and leads to Shackleton. The lower portion of the icefall involved step-cutting; the middle, a few long stretches; and the upper, confrontation of a long wall of séracs which threatened to bring progress to a halt. We chose the direct approach: a stairway carved up the corner of the lowest obstacle led us to the top of the icefall.

Mount Shackleton is a long ridge with three summits, separated from one another by nearly a mile and differing in altitude by scarcely 50 feet. Our plan was to attain the ridge about 500 feet below the western summit and traverse the main ridge to the central peak. We passed a small icefall by a few tenuous bridges and reached the ridge with little difficulty. Most of the north face of Shackleton is a sheet of sheer, steep ice; the south face is steeper rock. The main corniced ridge, however, was generally broad enough to provide a pleasant if "interesting" route upwards. We found that the central summit is about 20 feet higher than the western and a few feet higher than the eastern. Between the central and eastern summits rose an obstacle in the form of a rock tower, but it was too late for an investigation of this. We left the summit at 4.30 P.M. and were lucky enough to beat a driving rainstorm to camp by 22 seconds.

Directly across from camp loomed the 6000-foot eastern precipices of tigerish Mount Clemenceau. We knew from Thorington's *Guide to the Rocky Mountains of Canada* that the "regular route" was on the west side of the peak. As this had been climbed no less than three times, it seemed that the only sporting thing to do was to seek out a new route. Accordingly, we set out four strong on July 16th to examine the north face. We believed that it might be possible to ascend the great northeast buttress which rises 4000 feet from the valley and, from the top of it, to follow the northeast ridge or north face to the summit. We crossed the Clemenceau Glacier

and climbed about 1500 feet of talus and loose rocks to the base of the northeast buttress. Then, with the immense wall looming above us, we thought perhaps the north face would look better. Having crossed a little glacier on a small north-northeast face of the mountain and ascended a prominent diagonal couloir, we found a most encouraging lower north face. It appeared that one could traverse diagonally up and across the face and thus reach a prominent ridge which cut all higher portions from view. But snow conditions proved poor; and, as we moved well out and up on the face, they worsened. We found ourselves in about two feet of wet snow over rock and ice. We therefore abandoned the traverse and cut straight up to the ridge through broken cliffs and ice.

The view from the ridge was more inspiring than encouraging. Before us lay a glacier basin of considerable extent, and directly across rose the upper north face of Clemenceau in a wholly unassailable series of ice cliffs and avalanche tracks. The savage aspect of the ice was such as to justify doubly the title of Tiger Glacier which has been bestowed upon it. It seemed that the only possible route lay near the crest of the northeast ridge, into which our ridge ran at an easy angle. The summit was still a long way above us; but it was now only noon, and our hopes ran high as we slogged through wet snow and breakable crust to the junction of the ridges. On the highest rocks of the northeast ridge we rested and ate lunch.

Above these rocks the ridge looked innocent enough. It started in a fairly long, wide slope of about 40 degrees. This seemed to be of snow. *Seemed* to be . . . Only a few steps were needed to show that beneath an inch of slush lay hard ice. The party came to a halt, debating. Finally, Graham volunteered to begin a flight of steps. Perhaps an hour and a half later, he had cut a way across the worst ice to a region where the snow was deeper. Here Graham and Georgia surveyed the situation: they found the snow under foot treacherous, the ridge above inauspicious, the hour advancing; they elected to return. I persuaded Rodney to follow me further. We climbed directly up the wet snow to the crest of the ridge, which was here broad enough to afford a path free from danger of avalanches, and advanced without difficulty to a point where the ridge was blocked by a line of ice cliffs. Fortunately, these were split by a crevasse. I found it convenient to chop a few steps in one side and wriggle up.

Rodney did not find the maneuver to his liking and fell into something. Reluctantly, we abandoned the attack and descended to the basin by a route on the north face. This had absolutely nothing to recommend it, except speed.

We rejoined Graham and Georgia at the top of the lower north face. The snow below us was very unstable. The only safe route down was by rocks at the western end of the face: they could be followed almost to a schrund below, and then one could traverse eastward along the schrund until a small ridge permitted escape to the north. It seemed that all the avalanches were quite localized and that, as long as two men could belay from the rocks or the schrund, there would be little danger. We reached heavy timber as darkness fell and spent the night around a roaring fire.

On July 18th Graham and Georgia attempted the east summit of Shackleton. As our previous route had so deteriorated as to become almost impassable, they were delayed in the icefall. Finding difficulties also with fresh snow on the east ridge, they abandoned the ascent at about 10,400 feet. On the same day Rodney and I climbed Tusk Peak (10,960 ft.) by the northwest ridge. The bottom of the ridge had some abominable rock, but the top 1000 feet were fairly interesting, with a high degree of exposure. We descended easily via the south ridge and west face, which had been used by Ostheimer and Fuhrer on the first ascent.

We revisited the drop area and then endured a stretch of bad weather. On the afternoon of July 23rd talk turned once again to renewal of the assault on Clemenceau. Graham and Georgia believed that the recent snowfall had rendered the northeast ridge impassable and elected to follow the "regular route," while Rodney and I elected to have another try at the slopes above Tiger Glacier. Nightfall found the two of us bivouacked below the north face—huddling under a large tree to keep out of the rain. But July 24th dawned clear. We ascended the lower north face directly and, with crampons, rapidly covered the big ice slope of the northeast ridge. As we approached the line of ice cliffs which marked our previous highest point, Georgia and Graham yodelled greetings from the summit. They had found their greatest difficulty on the regular route resisting a well-nigh irresistible sun-bathing spot.

Life was becoming interesting for Rodney and me. We climbed the ice cliffs by using a crevasse as a chimney and followed the ridge

for several hundred feet. The snow was treacherous on both sides of the ridge—and we saw that the ridge became exceedingly narrow. We paused and looked ahead. The summit was only about 300 feet above; but to the right the ridge dropped vertically for about 50 feet before reaching steep snow on ice, and to the left lay steep wet snow, and ahead flowered a delicate cornice. Our indecision ceased as a substantial section of the left slope slid, with an evil hissing sound, into the void. We retreated. When we came to the lower north face, we enjoyed another demonstration that snow conditions were poor: Rodney threw a small stone onto the north face—and almost instantly a strip of wet snow, perhaps two feet deep, six feet wide and (in time) a thousand feet long, was roaring downward. We descended rocky sections of the face.

By July 27th we thought it time to move south and east to climb Mount Tsar and visit the Athabaska Valley north of Mount Columbia. To obtain good snow conditions, we set out for the drop area at 2.00 A.M. By dawn we had packed up the remainder of the drop. Cursed with the burdens of Sisyphus, we stumbled across snow fields and through an unlooked-for icefall, and eventually reached pleasant meadows east of Mount Tsar. On the 29th Rodney and I made the first ascent of Mount Somervell (10,050 ft.), north of Tsar. We ascended a couloir on the east face and then, with little difficulty, the south ridge. On the following day Georgia, Graham and I made the second ascent of Mount Tsar, following mostly the north ridge but taking to the west ridge to pass the summit glacier.

By August 1st, having eaten enough to bring our loads to more reasonable poundage, we were encouraged to move eastward to the Athabaska Valley. We had with us a handsome map compiled by the Alberta-B.C. Interprovincial Boundary Commission. It had 100-foot contours, impressively printed in black, brown and blue. We had observed that, in the region we were to cross, it disagreed with Ostheimer's sketch map—but who could be so impious as to question a map with 100-foot contours? Alas, the map and the terrain bore no resemblance to each other. The map said Tsar Creek; we found a great glacier. The map showed a gentle slope; we found a cliff. Indeed, those contours could have been drawn as well on a desk in Ottawa as on a plane table in Alberta. Suffice it to say that by evening we found ourselves in the Athabaska Valley north of Mount

NORTH FACE AND NORTHEAST RIDGE OF CLEMENCEAU
Photo, G. I. Bell

King Edward. For those who are interested in this route, let me add that there is a valley glacier extending three to four miles west of the Divide, with an icefall (which could be difficult) one mile west. The best way to the Clemenceau Ice Field appeared to be a blunt ridge two and a half miles from the Divide.

Georgia and I now aspired to climb King Edward and Columbia; and we considered that a high camp would be desirable, as both peaks rise more than 6000 feet above the campsite. The weather had been fair for a good ten days, and we were emboldened to carry our sleeping bags and some food up the valley which drains the western slope of King Edward. We found a small ledge at 9000 feet on the southwest ridge of King Edward and remodelled it to provide two sleeping platforms. After a snack, we clambered to the top of King Edward by the original route.

Next day we wanted to climb Mount Columbia by the southwest arête. We had read in the *Climber's Guide* that "the mountain was rounded on its S. side and ascended by its S.W. arête (loose rock) to the summit snow (6 h.)." From the summit of King Edward, due west of Columbia, the southwest arête did not appear any too obvious. A south ridge was clear, but it ended in a series of precipices. Yet we of great faith made out what might be an arête leading up the west face, and we were confident that this must be the route. When on the following day we stood at the base of the west face, the thing did not look like an arête any more. But this *must* be the route: after all, "the mountain was rounded on its S. side," and there were only the south precipices to our right. So we started up the west face, slightly to the south of center. All went well enough, and presently we became convinced that an easy way through the band of cliffs at the top of the face would appear. No disgustingly easy pathway actually did thrust itself upon us. The first band of cliffs was black, and we surmounted it by an easy vertical chimney. Above was a yellow band—impressive enough to persuade us that we were on no southwest arête. We roped up. I led up a shallow chimney and over a big orange bulge to a rotten system of ledges. We followed this to the right and joined the arête which looked to us like the south arête—the *southwest* to anyone from the other side—as easily accessible from the east as appalling from the west. We scampered up to the summit and found that we had

UPPER NORTHEAST RIDGE OF CLEMENCEAU
Photo, G. I. Bell

taken only three and a half hours from the base of the west face. We returned to base camp that afternoon.

On August 5th we moved camp to the mouth of Habel Creek, getting doubly wet from the Athabaska and the rain. Next day we skirted the now snow-clad flanks of Mount Alberta and walked out to the Banff-Jasper highway.

G.I.B.

Ruwenzori, 1951

Ray Garner

CAIRO does not seem to be a logical place to start a climbing expedition, but that is where this one began. I had just spent four and a half months travelling the length of Egypt, doing the field production for a film on the rise of Pharaonic civilization. The Nile has played such an important part in the history of Egypt that I wanted to trace it to its source. A prelude, showing the birth of the river, high in the Mountains of the Moon, would be a powerful force in establishing mood for the story of ancient Egypt. I must also confess that it would afford the opportunity to fulfill a lifelong ambition—to climb in the Ruwenzori.

The work in Egypt was made possible by a special grant from the Harmon Foundation. These funds would not cover the extra journey to Central Africa. In addition, the time required for the overland journey would be prohibitive. The obvious answer was to fly. I told my sad story to the local public relations director of the British Overseas Airways Corporation. He contacted London. In two days I had my answer. B.O.A.C. would fly me, plus 50 kilos of baggage, to Kampala and return—gratis! This unexpected stroke of good fortune was only the beginning of a long series of extraordinary coincidences.

The distance from Cairo to Uganda is about 2500 miles and would take close to eight weeks by overland travel. I took off from Cairo at midnight on 19 August 1951, stopped one hour at Khartoum in the Sudan, and landed at the Kampala-Entebbe airport at 11.00 A.M. Eleven hours! I was now in the heart of British East Africa, on the north shore of Lake Victoria, just a few miles above the Equator. The Ruwenzori still lay more than 200 miles to the west.

I was stranded with all of my photographic equipment. I had no climbing gear, no companions, no way of getting to the mountains. Then things began to happen. I. R. Menzies, of the Uganda Mountain Club, welcomed me with open arms. I had sent a letter to the secretary of the club several days before, but it had not arrived. Now Mr. Menzies took me in hand, loaned me his personal climb-

ing outfit, and spent the evening poring over maps with me. Another climber, former secretary of the U.M.C., loaned me a chop box and cooking utensils. This was Ashley Greenwood, who, in 1939, had been selected for the Everest Expedition which was ruled out by the war. The next day Mr. Menzies made a number of inquiries which finally solved my transport problem.

In 1906 the Duke of the Abruzzi's expedition took two weeks to walk to Fort Portal. For me it was a pleasant day's drive in the company of an obliging tea corporation executive. The Mountains of the Moon Hotel had no room for me, even though I had telegraphed for a reservation. Fortunately, Mr. Menzies had given me a written introduction to the local British District Commissioner. When the D.C.'s office heard of my plight, I was invited to stay in a grass-roofed hut on the grounds of one of the British officials. The next morning I met the Assistant D.C. who was to make my safari arrangements. It seemed that I had really run into a snag this time. A large British geological expedition, now in the mountains, had hired all available porters.[1] Here I was very close to my objective, but it seemed farther away than before. On the way in, the previous day, I had caught a glimpse of the foothills looming through the clouds; but I had not yet seen the mountains. It was possible that I would never see them. That night my luck seemed to have run out.

The next morning I hired a car, drove into town for provisions, and then 40 miles to the British base camp. From here to the mountains proper was a five-day journey on foot. When I arrived at base camp, I noticed a sporty little roadster with a large pair of climbing boots protruding from underneath. My cheery greeting was warmly answered by a strapping young Englishman named Anthony Purkiss. He and his friend, David Bushell, had arrived only a day before. They were on a vacation trip from a Rhodesian mine where they worked as engineers. They wanted very much to climb Mount Stanley if they could find an experienced companion! This solved one of my biggest problems.

That evening the director of the Uganda Geological Survey, Peter Matthews, told us that we were welcome to use some of their porters. This was a fabulous piece of luck, for the men were com-

[1] See note by Peter Matthews, pp. 278-81 below.

pletely outfitted and we would be spared this heavy expense. To recount: in four days I had received free transportation all the way from Cairo to Fort Portal, a complete outfit from a total stranger, a warm welcome and the promise of a full-fledged safari, the friendship of two fine climbing companions! Everything was working as smoothly as if it had been planned for years in advance. Now only a continuation of the present foul weather could bring about failure. The mountains remained heavily hung with clouds. I had been told by everyone who knew anything at all of the area that August was one of the worst months in a region where the best were bad. Stanley camped at the base of these mountains for months, unaware of their existence. Our terrestrial good fortune would now require celestial cooperation if the photographic and mountaineering ends were to be achieved.

The road from Kampala to Fort Portal had crossed gently rolling savannah, with a few papyrus swamps along the route. The weather had been sparkling clear, with brilliant cloud formations hugging the horizons. Here, at the base camp, the sky was dark and brooding, the valley walls heavily wooded, and the dark mass of Portal Peak lost in the swirling mists. Here is an on-the-spot impression from my diary: "This is indeed a thrilling experience. Here we are at the end of the world preparing to ascend into the legendary Mountains of the Moon. The clouds, which louse up my pictures, only serve to increase the weirdness of the scenery. I view it as a complete outsider—haven't really had time to adjust to this strange land. Cairo is too few days away." This is the great disadvantage of the airplane: it outspeeds the perceptions. The Duke was better prepared by his lengthy approach journey.

Base camp was in a highly photogenic location—if only the clouds would lift. The road, twin ruts for the last five miles, ended at a cluster of native huts. These were made of grass and were conical in design, with tiny pagoda-like ornaments at the apices. The British camp, now a part of the village itself, was composed of two large tents, a few grass huts and three bright aluminum prefabricated houses. These were also round, with flattened conical roofs. They were very practical, roomy, cool in the sunshine (when it shone) and easy to transport when disassembled; but they looked out of place in this African wilderness. The village was set on a small mound at the bottom of a tight valley. To the east the valley

swept down to the open plains; to the west it climbed until the huge black bulk of the Portal Peaks turned it aside. The scene, spectacular though it was, was not unlike many of the valleys of our own Rockies. The vegetation, the conformation of the mountains, looked much the same; but the primitive village and its people reminded one that this was Africa.

That night there were eight of us for dinner: Purkiss, Bushell, Matthews, four other members of the expedition and myself. The talk was highly stimulating: as always in the mountains, we talked of those things from which we were now far removed—politics, religion, art, music and literature. I shall never forget that evening —the good food, the good talk, the warm hospitality. Most of all, I shall never forget Peter Matthews. Cultured, conservative, intensely devoted, he seemed the very epitome of the classical best of the Briton in far lands. It was not until the end of a long evening that we turned to the business of maps and final preparations for our safari. It was finally decided that we should require the services of 13 porters for ten days. The members of the expedition, if they lent us these men, would have to curtail a portion of their work; but they graciously insisted that we should take them.

At high noon on August 24th Dave, Tony and I, with 13 porters (or, rather, twelve porters and a headman), pulled out of base camp and started up the valley. Nine of our twelve carriers were transporting our food and equipment; the remaining three carried heavy loads of smelly fish, corn meal, sugar and tea—enough to last all 13 for ten days. Our porters were rather elegantly fitted out in sweaters, Eisenhower jackets and woollen shorts. Each also carried two woollen blankets. The headman, maintaining the dignity of his position, wore an ankle-length black woollen overcoat. A battered pith helmet completed his costume. All were barefoot, and each carried a stout six-foot stave which we were to see put to good use on the trail.

Soon after leaving the base, we began to encounter deep pockets of mud along the trail. The traffic of the expedition's support parties, which was an advantage in clearing the heavy underbrush, had made a bog of the path. Incredibly, the mud persisted on 45-degree slopes! We could not slip very far because of the tangle of roots, but it was very tiring. In the bottom land we frequently sank in above our knees. After struggling through four deep streams, we

began to pull up one of those interminable ridges which are the bane of mountaineering. Here the trail was firmer, but the continuous pull up the steep slope was so exhausting that I feared for my future as a climber—until I remembered that only a few days ago I had been at sea level in Cairo. Encouragingly, Tony and Dave seemed just as bushed. The natives, even though they carried heavy loads, appeared to be in fine shape. Their staves, used as third legs, proved so helpful that we had some cut for our own use. They were particularly useful in probing the depth of mud pockets.

At twilight we reached Camp II. Here was a prefabricated aluminum hut, about 20 feet by nine, divided into two rooms. It had no bunks or flooring, but we had enough tarps to shield us from the damp ground. A slow drizzle settled in for the remainder of the night, so we were very thankful for the roof above our heads. This hut, erected by the Uganda Mountain Club, will later have a floor and permanent bunks. The altitude was 8400 feet.

On the morning of August 25th, at ten o'clock, we took leisurely leave of Camp II. The sky was overcast, threatening more rain. For the first hour and a half the trail was easy. The grade was gentle, and the footing sound. Then we came to the Mobuku River. Swollen by the rains to a wild torrent 60 feet wide, it gave us some anxious moments. My camera-bearer, who was carrying the lightest porter load, expertly fought his way across. I followed, wearing my boots. The water was very swift, the bottom uneven; a ten-foot fall lay directly below. I blessed Menzies for the gift of his hobnails: without them, I believe I would have gone down. Both Tony and Dave crossed barefooted, chilling their feet to numbness. The water was close to waist depth and icy cold, but it did not chill me through my woollen pants and socks. (This is a strange thing—that wool can protect against cold even under water.) Once across, I had to empty my boots and wring out my socks.

A half-hour later we had to recross. Fortunately, we found a fallen tree which made an interesting bridge, eight feet above the churning torrent. Now we faced another exhausting pull up an endless ridge. The monotony was broken at one point when the camera-bearer pointed excitedly upwards and we watched a family of five large baboons swing overhead.

At about 9500 feet we passed through a bamboo forest. This would have been a real barrier if the British expedition had not

already slashed a path through it. Beyond the bamboo we moved into a dank rain forest. The afternoon journey was a nightmare of mud, vines, roots, brambles—and more mud, mud, mud. It was not actually raining, but the air was heavy with moisture. Many trees were so completely covered with lichen and hung with moss that the trunks were invisible. The trail was a veritable swamp in places, and even on the steep slopes there was no relief from the tenacious mud. The continuous strain of pulling our feet clear, and the weight of the thick, black mud clinging to our boots, made us look as sad as we felt when we staggered into Camp III. This hut (10,640 ft.) was completely finished. The aluminum outer shell was insulated; there were four comfortable bunks and a most welcome stove.

The following day we pulled out of Camp III at 9.30 A.M. Agan we fought mud all day long. At noon we reached a large cache of provisions left by the geological expedition. This included food for the porters as well as for whites. We had permission to help ourselves, but we planned to go right on at this time and send the porters back the following day. Dave waited here for a while with the porters (who insisted upon cooking a noonday feast) while Tony and I bashed (British term) on ahead. The trail so far had led through a maze of twisting valleys; now we began to head up the main canyon of the Bujuku. The side walls were very steep and hung with lacy waterfalls. The canyon bottom went up in a series of broad shelves, covered with exotic vegetation. Amid the swirling fog and out-of-this-world foliage, we could easily imagine ourselves on another planet—perhaps cloud-shrouded Venus. We shall always remember this experience more as dream than as reality. The groundsel, giant lobelia and senecio combined with the lush heath forest to create a landscape of indescribable fantasy. The complete absence of insect or animal sound added to the weirdness. It was as if we had stepped back millions of years into the remote past, when the first primitive growths crept across the face of the cooling earth.

The ever-present mud was now dotted with small clumps of grass. Each tiny island had a stout "trunk" which reached down to the solid earth beneath the mud. The grass heads rose two feet, on an average, above the muddy surface. The best way of travel was to jump from island to island, from swaying clump to clump.

Because they were spaced about four feet apart, it was necessary to maintain a rather rapid, full-length stride. At this speed it was important to gauge accurately the distance and angle of impact—or suffer a humilating mud bath.

At 3.00 P.M. we suddenly burst upon Lake Bujuku—a bright jewel set in the cirque formed by Mounts Stanley, Speke and Baker. The sun came out briefly, revealing the peaks in all their glory. The Stanley Glacier was plainly visible; it seemed to be several hundred feet thick where it overhung its high plateau. After our days of dull skies and dark foliage, the brilliance of the high snows was excitingly beautiful. The trail led around the shore of the lake and over a half-mile beyond. It ended at the door of another aluminum hut. This one was fully insulated and had comfortable bunks. A good wood stove with a drying rack and a full-sized dining table made it a very comfortable base of operations. This was the highest hut, at an altitude of 13,000 feet. Even with this array of comfortable shelters, only six parties have reached the summit of the highest peak.

We spent August 27th in taking pictures and in a short climb up to the Stuhlmann Pass. Here, at 14,757 feet, we could look down into the Belgian Congo. Patches of sunlight and swirling clouds made for some spectacular photographic effects. But even up here the deep mud persisted! It grew very cold. That night the hut was a small, snug island of warmth and cheer in a chilled, mysterious world. Our porters camped in a shallow cave down near the lake. They must have been freezing. We could hear the wind whirring through the groundsel and senecio and the thunder of the waters in their mad rush to join the Nile.

On the morning of August 28th I left the hut alone and shot pictures on my way down to the porters' cave. The rain drove me to seek shelter with them for an hour. This was a strange experience. They crouched like animals around a communal bowl, eating thick porridge with their fingers. So Neanderthal man must have crouched over his food, ages ago.

When Tony and Dave arrived we organized a six-porter safari and started up the slopes of Mount Stanley. First we had to cross the floor of the valley above the lake. We did this very carefully, in an attempt to keep our feet dry. We supposed there would be little mud higher up. Unbelievably, though the path became very

steep, the mud was still a major problem. The thick maze of roots held it in pockets so that, even though we had to pull ourselves up 75-degree slopes, we still had mud to contend with. At about 14,500 feet we finally moved on to solid footing.

The sun was in and out all day, clouds continually veiling and unveiling the high peaks. The trail followed a zigzag course until it finally broke out onto a high rocky ridge. This was as high as our porters would go. The sky had clouded over once again, and the air was bitter cold. The porters had done very well to carry our loads thus far, so we instructed them to return to Lake Bujuku. (Bare feet—brrrrr!)

We set up camp at 14,858 feet. The ridge was quite steep, but our site was out on a spur and well beyond the range of falling rock. Suddenly the sun broke through, providing me with the most wonderful cloud effects I have ever photographed. Then the clouds swept over us, and we had an anxious hour because Tony had wandered off to scout our route for tomorrow and we could not locate him in the fog. I did a lot of fancy climbing searching for him. He answered none of our calls although we could hear their echoes rolling down to the valley. He soon returned—even missing completely the rain squall which wetted our camp.

Menzies had loaned me an alpine tent specifically for this camp. It would not shelter the three of us. We decided that Tony and Dave would sleep in the tent, while I, with the only air mattress, would shelter under a tarp. It began to snow as we climbed into our sleeping bags at seven o'clock. It snowed the rest of the night.

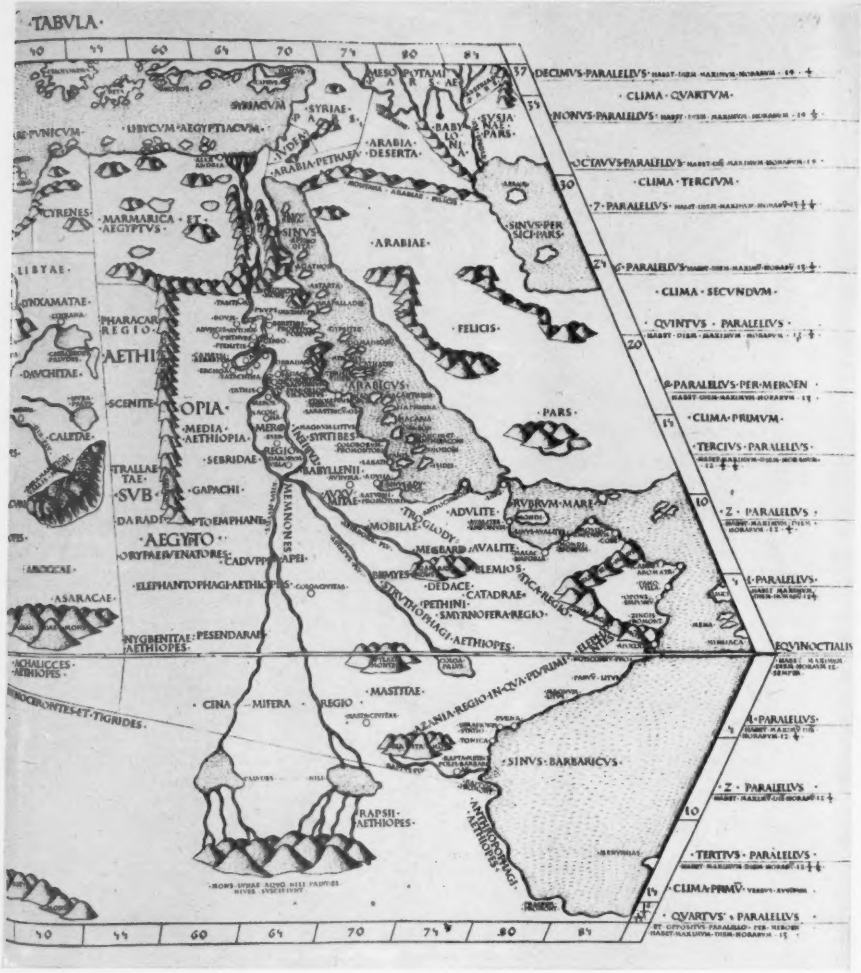
At dawn on the 29th—the day we were to make the attempt on Mount Stanley—I was awakened by a shout from the tent. It was very difficult for me to move. I was buried under seven inches of snow! Tony and Dave called to say that they were preparing to descend to the hut. Their body heat had melted the frozen tundra beneath the tent and flooded the floor. My air mattress had kept me well clear of the ground. Dave, in particular, seemed to be on the verge of pneumonia. We do not know how low the temperature had dipped, but our drinking water was frozen solid. They packed their bed rolls and started down, quickly disappearing in the swirling snow. I stayed put, remaining in position for 17 hours. I was following the advice of Paul Petzoldt, who says that the best way

RUWENZORI

Top: Alexandra Peak of Mount Stanley

Bottom: Margherita Peak (16,794 ft.), highest point of Mount Stanley. This is continuous with the plate above. The left-hand line marks the Duke's crossing from Alexandra in 1906. Purkiss and Garner gained ridge at low point on right in 1951

Photos, V. Sella



THE MOUNTAINS OF THE MOON ACCORDING TO PTOLEMY
From the 1480 edition of the *Geographia*

to contend with a storm on a mountain is to make yourself comfortable, put your mind on other things, and wait it out with cow-like stolidity.

My horizon was limited to ten yards of pearly fog. Occasionally

Although Ptolemy drew his map of the Nile in the second century A.D., it was not until the close of the 19th that the river was completely explored. The similarity of the ancient work to the modern sketch map is amazing. If Ptolemy had drawn his Equator a little farther south, his guesswork would have been almost perfect—or *was* he guessing? Certainly the Ruwenzori and his *Mons Lunae* seem to fit together

I could hear avalanches rumbling down. I was very much alone in an unreal, mysterious world. My reasons for remaining were two-fold: the ridge was an excellent photographic location; and, with me still up there, the boys would not give up the attempt on the

peak. Since it was only one day away, even a small break in the weather would give us our chance.

By noon it had cleared sufficiently for me to crawl reluctantly out of my warm cocoon and see what I could do about drying and repitching the tent. When the sun appeared I left the tent spread on a rock to dry while I shot film furiously in all directions. As soon as the sun ducked behind the overcast again, I repitched the tent in what promised to be a drier location. At 3.00 P.M. two porters came out of the mists looking exactly like the Asiatics in *Lost Horizon* (except that these had no shoes). Indeed, the approach to the camp looked very similar to the ledge leading to the "Valley of the Blue Moon." Their mission was to help me down the mountain. When, with my two words of Swahili and a great deal of sign language, I indicated my intention of remaining, they obviously thought I was mad—even for a white man. I gave them a note urging the boys to come up the following day. After another futile appeal to reason, they reluctantly started down. Bare feet in the snow—and they thought I was crazy!

That evening the world was dim and damp and chill, and I was the only creature left alive. I huddled over a small fire, crouched in a frail shelter. All that separated me from earliest man was that my fire was a Heatab (works like a charm) and my shelter an alpine tent. A supper of hot spaghetti and steaming tea brightened the outlook enormously. I began writing this account.

August 30th was perhaps the best day for photography in the history of the Ruwenzori. If Tony and Dave had been able to stay, we could have climbed the mountain. Everything I had read, everyone who had advised me, indicated that late August was one of the worst possible times to expect decent weather. If I had been able to order weather at will, I could not have asked for better conditions than now existed. The recent storm had scoured the atmosphere and dusted the peaks with gleaming snow. Everything stood out in sharp, clear relief. Great towering cumulus clouds crowded the horizon, and filmy wisps clung to the topmost peaks. This was indeed a day to remember. It was on this day that I made the shot which was the real objective of the entire venture: the birth of the River Nile as single drops of water falling from the snout of the Stanley Glacier.

The watershed of the White Nile is vast, encompassing much

of the Southern Sudan and British East Africa.[2] Lake Victoria collects a considerable portion of these waters and sends it northwest to join with the overflow from Lake Albert. These combined waters then sweep northward into the Sudan. Since the Ruwenzori Mountains are considerably higher than any other portion of the entire watershed, I believe that we can justly claim with Ptolemy that here indeed the mighty Nile is born. Some 1800 years ago he wrote: "There rise the Mountains of the Moon, whose snows feed the lakes, sources of the Nile."

All that morning I had a photographer's field day, scrambling all over the ridge and the tongue of the glacier. Several hundred feet above the camp there was a spectacular, clear view of the east face of Margherita Peak—topmost point of the Stanley massif. At noon I suddenly was conscious of the cheery clink of an ice-axe, and then, promptly, of Tony's tow head. He had come all the way from Bujuku Hut, valiantly trying to catch up because he thought the brilliant weather would force me into a solo attempt. I must admit that the temptation was great, but reason ruled it out. It was now too late to try for the summit, but we decided to get a closer look and plan our route for the morrow.

We moved further up the rock ridge, which at this point was parallel to the tongue of the glacier. After two false starts we were able to cut up 400 feet of moderately hard 45-degree ice to the practically level top of the glacier. Perhaps "ice cap" is the more accurate term. The Stanley Glacier is a huge ice cap at about 16,000 feet, with several minor peaks rising from its edges. We should now have had a pleasant walk over the snow to the base of Margherita. Not so: the sun had overdone its work, and we sank in to our knees. A half-mile of this was exceptionally exhausting, but it brought us close to our objective. We now stood at the base of Alexandra, the second highest peak. A short distance away was the heavily corniced face of Margherita. Forty-five years ago the Duke's party was able to traverse from the summit of Alexandra to Margherita. This no longer appeared practicable. The gently rising east ridge seemed to be the answer, but there did not seem to be a weak spot in its formidable array of cornices. We knew that other parties had made it up this ridge, but we had also been told that constantly changing

[2] Although the Blue Nile rises in Lake Tana in Ethiopia, the major volume of water comes from the White Nile, which has its beginnings in Equatorial Africa.

snow conditions offered a different problem to each attempt. At 4.00 P.M. we started back, reaching the ridge camp in two hours. After a little tea, we squeezed into the tent for the night.

The last day of August dawned clear and cold. We left camp at the first light—6.30 A.M. Again we had to cut steps in the ice up to the top of the glacial plateau. (Those of yesterday had melted and refrozen.) Snow conditions were absolutely perfect for walking. We strode rapidly across the level field to the base of Alexandra. The sérac area between the two peaks looked as if it might prove troublesome, but we easily passed it on several convenient snow bridges. We took some movie shots of the twisted ice formations, and then cached the tripod and all movie equipment under a sheltering ridge.

The main (E.) ridge of Margherita now lay directly ahead. Its protective cornices went up in a series of giant steps. We had to find a way between the steps and onto the ridge proper. We had been advised to gain the ridge as low down as we could. It was possible to kick steps up to the lowest cornice. I then proceeded to cut steps around its base. The top of the ridge lay just beyond, but it was first necessary to traverse about 40 feet of very hard, steep ice. Since I did not relish the job, we decided to see about trying to turn the second cornice. This took a good half-hour of cutting. Again I looked across an ice cliff, even more forbidding than the first. We retreated to the first position.

The weather was behaving perfectly, so we were not in too great a hurry; but my arms were feeling the strain of step-cutting. Dave (who had remained in the Bujuku Hut with a bad chill) had had some experience in the Alps, but Tony had never climbed before. He was equipped, however, with the build of a Petzoldt or a Pownall—with nerves to match. Tony was one of the finest natural mountain climbers it has ever been my privilege to be roped to. He quickly learned sound belay techniques, so that I felt securely protected; but it did not seem wise to have him lead. This put all the burden of cutting on me. That he had learned his lesson well was proved in the next few minutes.

At the base of the first cornice, Tony jammed his ice-axe into the snow to belay me. The ice wall was at an angle of 70 degrees. It was unusually hard. It required many sharp blows to hack out even the smallest foothold. I tried to save strength by cutting very

shallow steps. I was moving in a direct traverse, some 25 feet from Tony, when I slipped. I swung in a great arc, spidering in against the face with hands and feet so as to protect my head. All I could think of during this action was my precious Battersby hat sailing down into the depths. I swung down beneath Tony and out of his sight. He had a few anxious moments because I could not immediately answer his hail. When I recovered breath and equilibrium, I shouted instructions for Tony to lower me to a rock outcrop. The only injury was a pair of lacerated hands, but the cuts were mere scratches. I quickly cut my way up and continued on. The sun—in and out during this adventure—now burst out in force, and I badly needed protection for my head. By tying the four corners of a handkerchief I made a passable hat. This, of course, was poor defense against Equatorial sunshine, so I placed a cone of snow on top of it. As long as I kept this replenished, there was no danger of sunstroke.

Forty feet from Tony's position I came to a mass of huge icicles. I lashed at this in fury, cutting it down to a secure hook-shaped anchor. I then proceeded to cut across the face beyond it, with my rope running over the hook. A fall now would result only in a minor swing. The surface gradually grew softer as I continued, until I finally stood in the snow on the top of the ridge. Tony came across the face like a veteran. When he joined me we found that the ridge, so terrifyingly corniced along its edge, was a mere walk-up. During this trudge up the easy snow slope, we felt the altitude for the first and only time. We were forced to halt frequently. We were now close to 17,000 feet—not very high as mountains go—but we were fresh from the jungles.

We could not walk all the way to the top. About 25 feet from the actual summit, we faced a huge cornice, 15 feet high and apparently encircling it. There were but two visible possibilities. At one point a wedge of ice reached to within seven feet of the cornice top. It seemed barely possible to stand atop this wedge and try to cut through, but I did not feel up to it. To the left a sheer wall met the cornice. This offered little hope, but another sloping ridge seemed to join the cornice around the corner. If we could cut out and around this corner and gain the ridge, it looked as if we could walk to the summit. I started cutting up the practically vertical ice wall. The ticklish part of this was that Tony could not get into position

to give me an adequate belay. He got into a hollow under the cornice where he could stop me after a 20-foot fall. This would have been a perfect spot for an ice piton, but we had none. I cut five steps straight up. Under the rime the ice was as sound as granite. I cut steps very deep, slanting them in and down. When I reached the cornice, I started cutting left. It was just like climbing up to the eave of a tall building and angling your head around the corner to see the other wall. Fortunately, the other ridge abutted just to the top of the cornice. Six more deep steps were necessary to reach it. Once on top of this cornice, we had only a short walk to the summit proper, whose last defenses were two miniature cornices of two and three feet. Tony passed me and was first on top. The first mountain he had ever climbed was a real one.

We stood on the summit of Margherita at 3.20 P.M.—eight hours and 50 minutes from Ridge Camp. This highest point of the Ruwenzori is 16,794 feet above the sea. The summit was entirely snow-capped; there was no sign of rock except on the ridge running northwest to Albert Peak. The view, seen through sweeping clouds, was magnificent. From our arctic perch we could look down into the steaming tropical jungles of the Congo. To the east and south the great masses of Mounts Speke and Baker dominated the scene.

We were excited by the realization that the snow under our feet, and that of the entire range, would some day feed the Nile and sweep majestically through the land of the Pharaohs. (A geologic quirk turns even the south and western drainage north into Lake Albert to join the White Nile.) Our perceptions were soon dulled by a bitter cold wind. The descent over the edge of the big cornice was a tricky business. I went first, placing Tony's feet in the steps. Once back onto the ridge, we walked quickly to the lower cornice. Our steps were still in good condition, and we experienced no difficulty in crossing the face where I had fallen.

The snow down in the sérac area where we had left the pack had become very soft. We sank to our knees. The prospect of the long hike across the top of the glacier with the snow in this condition was very discouraging. Our fears were groundless, for we found the glacier firm and were able to stride rapidly across it. We had hoped for a quick descent to the rock ridge. Not so: our steps had melted and the edge of the glacier was refrozen. We lost much time, and the remainder of our strength, in cutting steps down to the

ridge. Once on the rock it was a mere scramble to the camp. We arrived at 7.00 P.M.—twelve and a half hours for the round trip, but we had made many stops to take movie and still shots. There was just barely enough light left to arrange things snugly for a cold night.

When we awoke on the morning of September 1st, everything was coated with rime ice. We remained in the tent until the sun had thawed things out. Four porters hove into camp, followed at some distance by Dave. These men had come up seeking us late on the previous day, and their report of an empty camp had worried Dave a bit. He had come up to see whether we were all right. While he packed things up in preparation for the descent, Tony and I crossed over to the snout of the glacier for more shots of the birth of the Nile. The sky was partly cloudy, but we had enough sunny periods to get our shots. No one could hope for better photographic weather than we experienced for at least part of every day that we spent above timberline. Several of these days were continuously bad down below. The entire day that Dave spent down at the Bujuku Hut was overcast and rainy—yet on that same day we reached the summit in bright sunshine. All of which suggests the possibility that there may be good weather high on the peaks at any season, though it may well be concealed from those below timberline.

By midafternoon, the cloud cover being complete, we hit the trail back to the Bujuku Hut. After five days and four nights on the mountain, I found the prospect of comfortable shelter most welcome. Tony had hurried on ahead to prepare our victory dinner. His efforts resulted in a culinary triumph. Over the years I have sampled the cuisines of four continents, but dinner that night at Bujuku Lake surpassed all I had tasted before. We began with sardines on crackers. Next came a large, delicious vegetable salad. The entrée was inspired: a concoction of corned beef, beans, peas and tomato sauce, seasoned to an epicure's taste. I never dreamed that such mundane ingredients could make such a heavenly combination. Dessert: canned apples, strawberries, cheese and crackers. Like the Lost Chord—it may be that only in heaven we shall eat such a meal again.

I should like to end on this pleasant note, but an uncomfortable experience lay just ahead. The night was bitter cold, and we were thankful to be indoors. Our safari started down at nine o'clock the next morning. Dave, Tony and the porters, with the exception of

my camera-bearer, went off at a rapid pace. I remained behind to take a series of shots of waterfalls and rushing streams to develop my Nile sequence. The weather again was superb. Ah-mair-ree, my Bakonjo porter, showed no nervousness about the disappearance of the rest of the safari. I went on merrily burning up film. The sky, filled with brilliant cumulus, provided a fine background for a series of studies of the fantastically contorted forms of the giant senecio. In a region of unreality the senecio, with its twisted stems, its crowned heads and draped beards, provided the most unreal touch of all. So engrossed was I that I paid no heed to the passage of time. Suddenly it was 5.00 P.M. The safari probably was now approaching the hut at Camp III, many miles ahead. We set off at a fast clip.

For the next two hours we fairly skimmed over and through the mud of the trail. By the time we reached the heavy heath forest, it was pitch dark. In addition, it had begun to hail. Ah-mair-ree made a valiant attempt to continue. My problem now was to follow a black man through a black jungle, and not step off a rock, fall into a hole, or bash my head on a tree trunk. Vines and creepers were constantly stroking us with cold, wet fingers. It was a nightmarish experience. To add to the confusion, we had language difficulties. He called me "Bwana," and I could pronounce his name. The only other word we had in common was "no." In the jet blackness we had only our ears and sense of touch to guide us. I marvelled at his ability to keep to the trail—until I realized that we were just wandering aimlessly through the forest. Soon we both fell into a stream. Since we were already soaked to the skin, this did not really matter. I hoped that we had pulled the camera and film cases out of the water in time. Both cases had tight covers making them practically watertight. We were, figuratively and literally, up a creek. The hopelessness of finding camp that night was now apparent.

I held Ah-mair-ree with one hand while I groped for a tree trunk with the other. Putting both cases on the ground, I sat on them with my back against the tree, and drew him down in front of me. Holding him between my knees, back to my chest, I clasped my hands around his stomach. Since I was better dressed to withstand the cold, this seemed to be a good idea. We were still above 11,000 feet and could expect a chilly night. If we could only keep the middle of our bodies warm, we might escape ill effects. Ah-mair-

ree seemed to be shaking with fear as well as cold. We discovered the reason for this next day.

My watch had just enough radium left on the dial to clock the progress of an incredibly long night. It stopped hailing, turned to rain, then stopped altogether at ten o'clock. But all night long water dripped down on us from the heavy foliage. Twice I pushed Ah-mair-ree away, took off my boots, and wrung out my socks. On both occasions I got to my feet and shadow-boxed to restore circulation. I took Ah-mair-ree's arms and tried to persuade him to exercise a bit. He answered, "No," and slumped to the ground. Not being able to understand my reasons, he undoubtedly thought this but one more eccentricity of an obviously mad white man.

As we shivered and shook on our lonely vigil, I had visions of the wonderful meal Tony and Dave were probably holding for my arrival. We sat and vibrated for eleven and a half hours! (Here on the Equator the nights are about twelve hours long. My five other enforced bivouacs had occurred in the temperate zone where the hardship had lasted only about eight hours.) At long last a dull grey dawn gave us enough light to see by.

We got up—and fell down again. It was several minutes before we could make our legs behave, and then we could only stagger drunkenly along. Ah-mair-ree quickly located the trail. In 40 minutes we reached the hut. Naturally, I was a bit miffed with Tony and Dave for not sending a party out to look for us. They said that the Bakonjos would not travel in the forest at night because of the leopards! This was why Ah-mair-ree had shaken so hard during the night. It is questionable whether a leopard would attack two full-grown men; but we were such sad, sorry-looking specimens at the time that no self-respecting leopard could have feared us. At any rate, this is a question we would just as soon treat as academic.

Both Ah-mair-ree and I had to hug the stove for quite a while before we were defrosted enough to think about food. I then ate the big dinner which had been saved for me—at 7.00 A.M. By nine o'clock our safari was again on the march. One hour out of camp we found leopard spoor on the trail. Later on, at Fort Portal, we learned that the Bakonjo have a real respect for leopards: a few years before they had refused to travel at night even to carry a message for a white woman who was dangerously ill. These natives will

go anywhere in the daytime, carrying only their staves, but they will not travel at night. Poor Ah-mair-ree!

At noon we were surprised to encounter Matthews on his way up the trail. This was a bit of a disappointment, for we had hoped to enjoy another evening with him at base camp. When we told of our successful climb he kept saying, "Good show! Good show!" in the explosive sort of way I imagine Teddy Roosevelt must have used when he shouted, "Bully! Bully!" It was so delightfully British, and came from a gentleman normally so reserved and conservative, that I felt like giggling and glowing all at the same time. We talked a good long hour away. As we parted he told us that we were not to pay for any of the food we had eaten at the huts or for the supplies we had taken from the expedition's cache. All he would let us pay was the porters' salaries. Ours was probably the least expensive safari ever to enter the Ruwenzori.

Nine hours after leaving Camp III we swung into base camp, the Bakonjo singing their wild chant, we carried on by the melody. We made a grand entrance—but there was no one to welcome us. Professor W. Q. Kennedy, the leader of the expedition, had gone to Fort Portal for the day. While we three waited for him, we wallowed in the luxury of a bath and clean clothes. By eight o'clock that evening he had returned, and we sat down for another good dinner and hours of stimulating conversation. Professor Kennedy, a distinguished geologist, has such a wide range of interests that, weary though we were, we talked on until midnight.

Four days later I was back in Cairo. I had been away only 19 days. A short time afterward I flew homeward. At one o'clock in the morning on September 15th I was shopping for curios in Iceland; at three o'clock the same afternoon I attended Mal Miller's wedding in Tarrytown, New York.

A Note on Ruwenzori: The Mountains of the Moon

[*We are indebted to Peter Matthews, of the Geological Survey of Uganda, for the following note.*—Ed.]

The great mountain massif of Ruwenzori, as you probably know, has been an enigma for many centuries. Aristotle mentioned a high mass, a possible source of the Nile, which was touched by the Moon and turned to silver. Even to the present time this enigma remains, for the great

mass when viewed from the broad, sunny plains surrounding it is seldom visible below its extensive cover of clouds. Stanley, when he camped in the country below in 1888, did not see the snow until he had been there for several months. The mountain is of course still a mystery from many points of view. One may mention the extraordinary types of giant vegetation, the geological setting of the mountain in the middle of the western rift valley, or the nature of its past and present glaciation.

On the map the mountain is roughly elliptical in shape, pointed at the northern end and broader at the southern end. It is about 75 miles in length and 35 miles at its greatest width. The line of the Equator passes about 20 miles south of the central area. The nose rises in a single ridge to the highly dissected central area. A general picture is that of a whale-backed mass. It should be remembered that the mountain is not a folded range, but a great earth block which the elements have sculptured to its present form. For this reason, the setting of the high peaks is unusual. There are six high masses rising to more than 15,000 feet in the central area, and in the south there are others above 13,000 feet. The six high masses are named Mounts Stanley, Baker, Speke, Emin, Gessi and Luigi di Savoia. All support permanent snow fields. Mount Stanley is itself composed of six peaks, including the two highest, Mount Margherita (16,794 ft.) and Mount Alexandra (16,749 ft.).

The first large-scale expedition to Ruwenzori was that of the Duke of the Abruzzi in 1906. An account of this expedition has appeared both in Italian and in English; it contains many magnificent photographs of the snow peaks. The achievement of the expedition can be measured by the fact that none of the high peaks was left unclimbed, and that the approach to the mountain was on foot from Entebbe—a distance of over 200 miles. Captain G. N. Humphreys made a series of journeys on Ruwenzori in 1926 and 1932, in the company of G. Oliver. The distances covered and the new ground explored made for a feat of endurance and a notable contribution to our knowledge of the mountain. In 1932 a Belgian expedition, led by Count Xavier de Grunne, approached the mountain from the Belgian Congo for the first time. The British Museum sponsored an expedition in 1933. A party led by P.M. Synge followed the Nyamugasani Valley from the south to the most southerly of the high masses, Mount Luigi di Savoia. Between 1933 and 1951 a number of traverses by members of the Uganda Mountain Club and by members of the British Expedition have opened up new routes on the mountain.

The British Expedition to Ruwenzori, under the leadership of Professor W. Q. Kennedy, completed the first part of its program in 1951 and will begin the second and final part in July 1952. The Expedition

is sponsored by the Government of the Uganda Protectorate, the Royal Society, the Royal Geographical Society, the Geological Society of London and the British Museum. One of the aims is to publish an accurate map of Ruwenzori from an aerial photographic survey.

Exploration on Ruwenzori has been under way for more than half a century, but considerable areas still remain unknown. This is true particularly of the southern end of the mountain. From the experience the writer has had, the ascent to the central high mass from the southern end is by far the most attractive, as the route follows along high ridges in contrast to the traditional route from the east up the steep-sided valleys of the Mobuku and Bujuku Rivers.

There are four Mountain Club huts on the route up the Bujuku Valley. The hut at 13,000 feet near Lake Bujuku is the terminal point, situated in the cirque formed by the three highest masses, Stanley, Speke and Baker. It is a good starting point for climbs on the high peaks. In 1951 a fixed bivouac (14,800 ft.) was established near the Elena Glacier below the snow-covered Stanley Plateau, which is the usual starting point for assaults on the two highest peaks, Margherita and Alexandra.* A memorandum of the Mountain Club of Uganda states: "The peaks of Mount Stanley may be climbed from this bivouac (Elena Glacier Hut) by a competent party under experienced leadership. The ascent of Margherita is a moderately long snow and ice expedition, the difficulties of which vary greatly according to the state of the cornices, which guard the summit and the summit ridge, and the size of the crevasses on the lower part of the final peak."

During the latter part of the Ruwenzori Expedition's work in 1951, we had a very welcome visit from Mr. Ray Garner. He had the good fortune to strike a patch of perfect weather and did a fine ascent of Margherita in the company of Mr. Anthony Purkiss, of Northern Rhodesia. He is, we believe, the first American to have reached the summit of Ruwenzori.

The great masses of the Mufumbiro, Mounts Kilimanjaro, Kenya and Elgon share with Ruwenzori many features of their natural beauty. They have a similar geographical setting, but Ruwenzori remains unique. It is the only one of these great Equatorial mountains that is not of volcanic origin.

* This was established after we left. A small aluminum hut now occupies the site of our high camp.—R.G.

List of References

1. Elliott, G. F. Scott. "Expedition to Ruwenzori and Tanganyika," *Geographical Journal,* VI (1895), 301-25.

2. Filippi, Filippo, de. *Ruwenzori: An Account of the Expedition of H. R. H. Prince Luigi Amedeo of Savoy, Duke of the Abruzzi.* London, 1908.

3. Grunne, Xavier de. *Le Ruwenzori.* Brussels, 1937.

4. Humphreys, G. N. "New Routes on Ruwenzori," *Geographical Journal,* LXIX (1927), 516-31. "Ruwenzori: Flights and Further Exploration," *ibid.,* LXXXII (1933), 6.

5. Moore, J. E. S. *The Mountains of the Moon.* London, 1901.

6. Synge, P. M. *The Mountains of the Moon.* London, 1934.

Summer in the Dolomites

Hans Kraus

THE southern foothills of the Alps do not rise immediately to high glacier peaks. In the east, they form relatively low ranges, little higher than 3000 meters—the southern limestone Alps. The Italian part of these mountains is known as *Dolomiti*. Emerging from lovely green valleys with pine forests and meadows reaching high up, the Dolomites are jagged and fantastic spires, built of grey and yellow coral limestone. One of the best known villages in this area is Cortina. Only three hours from Venice, it is situated in the midst of some of the most famous Dolomite peaks. Cortina and, even more, Misurina (which lies a few hundred meters higher and consists of only a few houses) have long been centers for climbers and skiers.

The Dolomites were explored later than the higher glaciated mountains. Sepp Innerkofler, with Grohmann, pioneered the first Dolomite climbs at the end of the 19th century, scaling many peaks previously considered unclimbable. Sepp, whose name is still very much alive, was killed in the First World War and was buried at the foot of one of his beloved peaks, the Cima Grande di Lavaredo. Even the enemy paid tribute to him at his rites. My own memories of the Dolomites begin with my childhood when I listened breathlessly to my father's accounts of the climbs he had made with Sepp. The normal routes were then considered great adventures, and I eagerly took to reading all the literature on these mountains. On clear days I could see them from Trieste, where we lived at the time.

Years later, my trips took me to these crags where I found myself part of a group of enthusiastic rock climbers, with headquarters in Misurina. The steep faces and lofty spires of the Dolomites have a strong call that no one can resist once he has listened. The desire grows to be up there, to feel the height and the space. I had looked longingly at these high peaks as a child. Now I was determined to try to turn some of those dreams into reality. Emilio Comici, one of the first men to climb sixth-class climbs—*sesto gradi*—was the unquestioned leader of our group. He was a rare person—quiet and

somewhat melancholy. But on the rock he moved like a dancer, and only there was he completely happy.

Emilio, together with the Dimai brothers, had just accomplished the most incredible climb—that of the North Face of the Cima Grande di Lavaredo—550 meters of straight, mostly overhanging rock, 250 meters of which consist of continuous sixth-class climbing. When Emilio invited me to repeat the route with him, I accepted with pleasure and trepidation. I had often looked at that face, and always with awe.

So we started out. The extremely difficult part begins with a long piton traverse to the left, some 100 meters above the base. Emilio climbed most of that pitch free—hanging by pitons and little holds, not using the rope for pull at all. He put in very few karabiners, thus making it necessary for me to climb free, too. I found my way to a piton that he had used for a belay. As I removed the karabiner, I lost my grip on the piton, my only hold, and fell. For what seemed an endless time, I became a terrifying pendulum, swinging in space. Emilio held me with the help of some pitons. When I finally stopped moving, I found myself several feet away from the rock. It took much effort and time to swing back to the rock, anchor myself, and work my way back. This incident ended the attempt and the season. A second try had to be given up in a heavy snowfall.

This was to be my last climbing summer in Europe for many years. But I never forgot the North Face. That fall haunted me and made me want to return and try again. The summer of 1950 saw me back once more in Misurina. We were a group of six, planning to make a film on rock climbing in the Dolomites, a film intended to show some of the color and beauty of these mountains and some techniques of climbing. During this trip, Dick Hirschland succeeded in making an excellent 16-mm. film, starring his wife Bonnie as the superb rock climber she is. Full color brought out the contrast between the steep, aloof spires and the soft, gentle valleys—the beauty of the lonesome and unchangeable mountains and that of crowded, equally unchanging Venice. We made many climbs, among them a film tour up the Piccola di Lavaredo and an aerial traverse to the Guglia d'Amicis. It took all of us quite some time to become accustomed to the steepness and exposure which one encounters steadily in these parts. I was fortunate enough to climax my climbs with the Spigolo Giallo, a 300-meter climb of ideal exposure and considerable

difficulty. Although at the time I did not have the necessary physical fitness even to attempt the North Face of the Grande, my wish to climb it increased each time I saw this forbidding overhanging wall.

When we began contemplating another film trip to the Dolomites, to take place in the summer of 1951, I secretly put the North Face at the top of my list. Early that spring I started building toward good physical condition by gym work, running and regular weekend climbs in our home cliffs, the Shawangunks. At the end of July we boarded the plane for Europe. Dick and Bonnie Hirschland planned to go via Switzerland in order to add footage on skiing and ski mountaineering to our film. Unfortunately, these plans were upset by an appendix operation which Dick had to undergo in Lausanne. So it turned out that I spent all of the month of August alone in Misurina in our old headquarters, the Hotel Misurina.

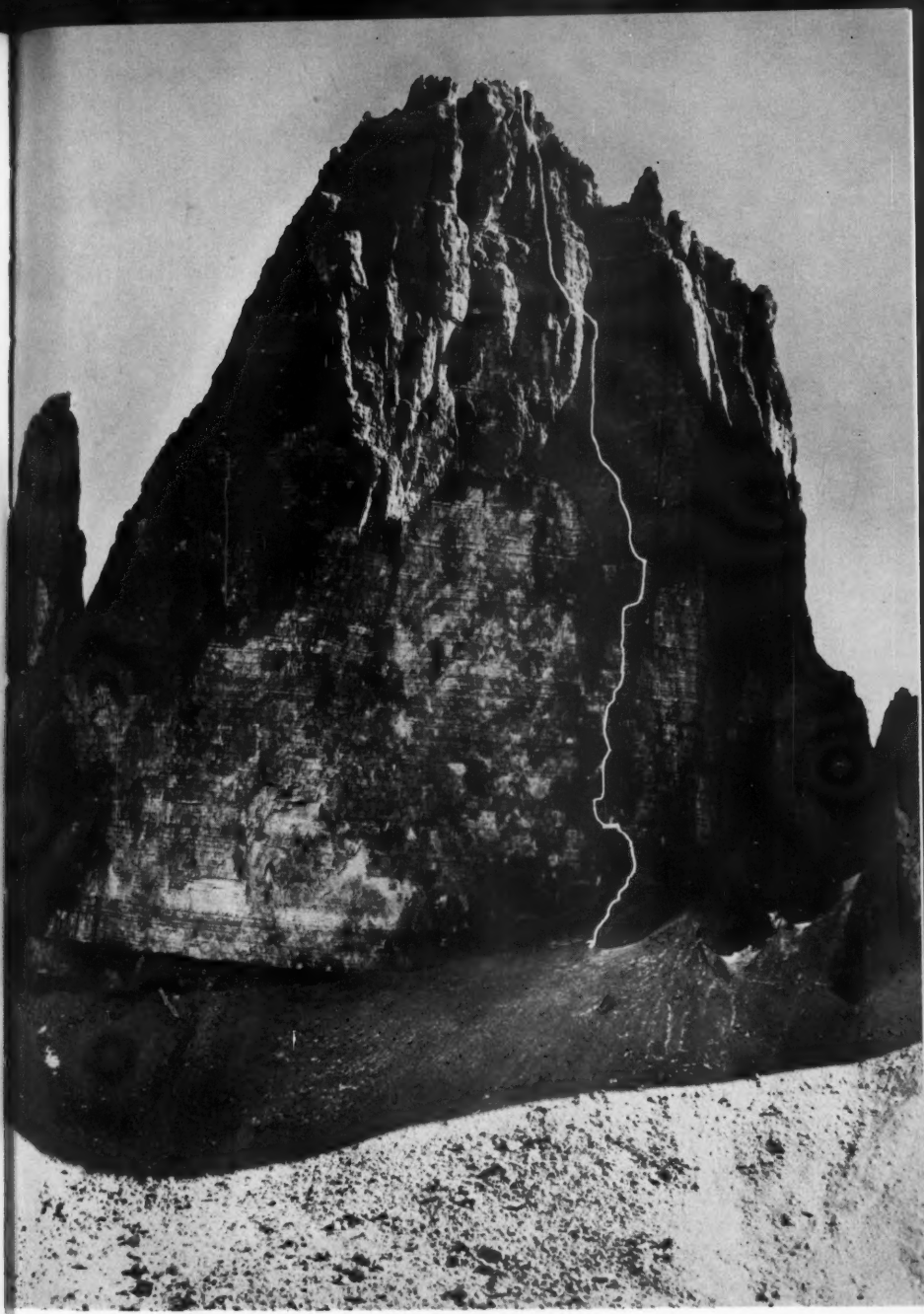
Since I had to look for partners right there, I decided to climb with either Valerio Quinz or Gino Soldà, both guides, and old personal friends as well. I have rarely climbed with guides and rather dislike being second on the rope. But these men were the best climbers in the area, and we knew each other well enough to agree that I would get a chance to lead occasionally.

I made several trips with Valerio, a very young man and an excellent climber, with whose father I had climbed many years before. The previous year Valerio had been with me on the Spigolo Giallo. We started with a few easier and shorter climbs such as routes on the Piccolo Popena, Guglia Giuliana, and then advanced to sixes such as the Spigolo Mazzorana in the Cadin delle Bisa, and the Emilio route up the Giuliana. In between, I made some solo climbs, among them the Cadin di San Lucano, the main peak of the Cadini —a completely deserted group rarely visited by climbers. All day long I did not see a single soul. Then, after I had spent a long time alone on the summit, the clouds grew dense and closed in, forcing me to leave.

One of the toughest climbs, though short, was a new route up the Guglietta, a little spire in the Piccolo Popena. The key pitch—one rope-length—is a constant succession of overhangs calling for strength as well as technique.

Finally Dick and Bonnie arrived for a few days and we climbed the Torre Grande of the Cinque Torri while Dick took films. This route had been pioneered by the Dimais and Miriam O'Brien Under-

NORTH FACE, CIMA GRANDE DI LAVAREDO
Photo, G. Ghedina, Cortina



hill. We enjoyed it thoroughly, in spite of some rock fall which caught us just as I was leading up the last difficult pitch. This route will always remain a good, enjoyable trip and a credit to the men and the women who pioneered it.

At this time, Valerio was taken quite ill and had to give up the Nord. Time was running out, so it was fortunate that Gino Soldà was free and more than ready to go along with me. We took one more training tour up the northeast ridge of the Ovest di Lavaredo. It happened that Gino and I picked the very day General Montgomery was inspecting maneuvers in this area. On the Forcella di Lavaredo we were greeted, much to our surprise, by a platoon of Alpini who presented arms. Only then did we notice some Italian brass who had arrived with us.

As we rushed towards the Ovest, we saw Alpini posted around and between the Cime. Gino gloomily muttered something about being shot at by mistake. I, myself, did not feel too happy about all this. All went well, however, until we reached the difficult part of this long climb. The Spigolo Ovest is approximately 600 meters high, rated as an upper fifth-class climb. But in its middle section there is a good sixth-class stretch requiring rope work, stirrups, etc. Just at this point, when we were separated by overhangs and could not see each other, hell broke loose. From all the peaks, corners, slopes and boulders, the Alpini let go with guns, machine guns, flares and tracers. The usually deserted and quiet hills shook with the blasts of sound, and the rocks under our hands trembled. Worst of all, we could no longer hear each other—which forced us to do rope work entirely by feel. Many unkind words were uttered, but they were drowned in the noise.

Then, as if by some prearranged signal, all at once everything became quiet just as we hit easy rock some half an hour or so later. After this trial by fire, we felt ready for the Nord. But now the weather gave out. As I walked up to Rifugio Longeres, where I planned to spend the night before the climb, heavy clouds came in and crept up the mountainsides.

The next day it looked so bad that Gino and I decided to wait. That morning, as a warm-up, we climbed a short 200-meter but beautiful corner of the Croda Passaporto, a nice new six, and "very handy near the hut," as Gino put it. We were back in time for lunch, and over a glass of Chianti Gino told me about his experiences as a

IN THE NORTH FACE

Photo, G. Ghedina, Cortina

partisan. He had been in charge of an anti-Communist group which was attacked by everyone around—Germans, Fascists, and Communists of both Jugoslav and Italian origin. Gino's group had survived somehow in the mountains, but he has not been very fond of war since. Now he spends his time guiding (usually two trips a day in the summer), and manufacturing a new type of excellent rock-climbing boot in the winter. Gino, an ex-Olympic skier, is still one of the best in Italy. The long list of his first ascents in the Dolomites (mostly sixes) is an impressive one.

The weather having improved somewhat, we planned to start out the next day. At 3.00 A.M. it looked uncertain. Clouds rolled in from the valley of the Auronzo; the moon wore a halo; the air was warm. Nevertheless, we set out. As we headed towards the Forcella di Lavaredo, the clouds followed us, and when we turned west on the north side of the pass, the clouds crept down and joined cloud banks coming from other valleys.

We scrambled up the first easy 50 meters of the climb, then roped up. We used one nylon and one hemp rope, a combination which we found very helpful in telling them apart. We had six stirrups with us and 30 karabiners. Since there are many pitons in the rock, we had taken along only a dozen for each of us. Now the weather looked slightly better, but still very uncertain. I gave up hope of leading part of the climb. If we were to do it at all, great speed was essential, and Gino had been through here before. Besides, he is by far the superior climber. So he led off.

The first difficult rope-length filled me with great fear. My fall of many years ago was as fresh in my memory as though it had been yesterday. When my turn came and I was working my way through the traverse, I had to force myself to go on. As a result, I climbed this pitch much faster than necessary and soon found myself at the belay point—a ledge big enough to stand on with both feet and a good piton for belay. The clouds had now dispersed, and the sky was blue—what we could see of it, with the tremendous face above us obscuring the firmament. We decided to go on. Gino mastered the difficulties with consummate skill. Never did he have to rearrange ropes or karabiners. It was hardly necessary for us to speak.

The North Face rises at a constant 90-degree angle, or even steeper. Rope belays or stirrups are necessary at every pitch. Holds and ledges are at a minimum. Resting at the third belay place, I

looked down again. The exposure was complete. The face extended to all sides, giving us a sense of the magnitude of this rock wall.

The next rope-length had a delicate free traverse. Then difficult overhangs continued. Now I felt for the first time that my fingers were less strong than at the start. A last great effort brought us to the bivouac place. Here the first party had spent the night. Here most parties still have to bivouac. Thanks to Gino, we had reached it in five hours—just in time, it turned out, because now the fog came rolling in and soon closed around us.

From here on the way is easier, and with the tension relieved, we both felt tired. Our short rest on the bivouac place, just long enough to have some sugar and chocolate, served to point out how good a longer rest would be. But we worked our way up. The rock became harder again—quite hard. We made a little detour, the Aschenbrenner Variation, which is more difficult than the normal way. Then, in order to return to the route, we traversed to the left. That was a mistake. Now we had to make a new variation, unnecessarily coming into still harder rock.

Finally, Gino yelled to me that he was back on the "normale." I followed over the difficult traverse and then saw the ropes leading straight up over rock which seemed utterly unclimbable. But by this time I had regained my strength and felt that where Gino could go first, I should at least be able to follow. I struggled up the steep rock, using the few minute protuberances. When I eventually appeared on his ledge straight from below, Gino looked as surprised as though I had come by helicopter. He himself had traversed and found an easy way up, little dreaming that I would attempt that crazy shortcut.

We had a good laugh. Reaching the summit, a little later on, we shook hands, both very very tired, but happy and full of satisfaction. Rest was sweet after eight hours of hard climbing. There was no view, but after all we both knew the view so well. Gino had been here innumerable times, over all the different hard and easy routes. I, too, had been here often—years ago with Emilio and Conte dal Torso over the "Stoesser" and many other times. I had been up here with Ken Prestrud and Lou Warner over the east ridge the previous year. Then there had been the trip with Bonnie and Valerio when we had arrived for a shivering, brief stay after making a new

"direttissima" through the South Face. That was the time we were caught in a violent thunderstorm and beaten by hail.

The thought came to me that 50 years ago Sepp and my father had been here, and had probably felt just as thrilled over their climb up the "normale" as we did today after the Nord. The Nord still rates among the few top routes. The mountain had not changed. There were the same pitons in the same places as so many years ago, and the same rocks standing so much longer than the pitons. It was a great comfort to find that something had remained completely untouched by time.

We walked down the "normale" slowly and leisurely. As we were approaching the road to the Rifugio Longeres, a man called to us from below, asking where we had been. We called back: "On the Grande." "Via normale?" he shouted, and then he and the girl with him burst into laughter. I recognized them as my brother and his wife. It was a pleasant surprise. They had just happened to arrive from New York, and on learning that I was in the North Face they had driven up to meet me.

In the Rifugio there was much handshaking, especially with Mazzorana, who runs the hut. He is an old friend who had also climbed with Emilio and still ranks among the best. Then we left for Misurina where we stayed up very late celebrating. The next day we returned to the Rifugio and walked to the Cima where my brother took innumerable pictures. The North Face looked good today—not less awe-inspiring, but somehow less grim.

Before leaving the following morning, I walked up the Popena alone very early to say farewell to all the peaks and to the quiet lake of Misurina. The Tre Cime were resplendent in the early sun. Then we were off on a quick drive to Venice, where my brother left. There I spent two luxurious days on the Lido, lying in the sun, eating good food, visiting in Venice, and walking through all the old narrow streets. I listened to the band on the Piazza San Marco, and was again awed by the cathedral.

Then I was on my way to Trieste, and from there home to New York via Paris where I boarded the plane. The very next week end saw me with my usual companions back in our old Shawangunks. In spite of all I had just left behind, these home cliffs were still beautiful and inviting. They continue to open new ways for us; they enable us to remain accustomed to rock and heights, and to

keep prepared for future climbs. We all look forward to many more of these climbs for many reasons: because they have helped to shape and enrich our lives; because they keep us young; because they make us forget our sorrows and increase our capacity for happiness; because the reason why we climb is the same as the reason why we sing, walk, dance, and even live.

American Entries in the Travellers' Book of the Grands Mulets, 1861-75

J. Monroe Thorington

IN 1943 the American Alpine Club published the writer's *Early American Ascents in the Alps,* which recorded many ascents of Mont Blanc in the 19th century. This was supplemented by two notes in the *American Alpine Journal*[1] and two papers dealing with the misadventure of 1870.[2] These writings covered almost all that was known of American activity abroad before 1890.

When the writer was in Chamonix in 1949, M. Paul Payot showed him the *Travellers' Book of the Grands Mulets* (*Livre des Grands Mulets*), and he has since made the contents available on microfilm. There are 425 quarto pages, with an estimated 2500 entries by climbers of many nationalities. Almost 100 entries are by Americans who either visited the Grands Mulets as an end in itself or attempted—usually with success—the ascent of Mont Blanc. The volume is destined by M. Payot to be an exhibit in the reconstituted Alpine Museum of Chamonix, under the auspices of the Paris-Chamonix Section of the C.A.F. The American material is herewith presented through his courtesy. M. Payot intends to publish the French material in a separate communication. The English entries have been referred to the Alpine Club (London).

For the first time one can see the actual signatures of the climbers and correct some of the names mutilated in the printed French lists. It now appears also that the French lists are incomplete, for the records of the Grands Mulets show four hitherto unknown American ascents (38a, 49a, 58a, 60a). The notations, as one might expect, are of unequal interest. The early Americans were not true mountaineers; their sole desire, in most instances, was to reach the summit of Mont Blanc. Times and weather conditions dominate the entries, with occasional remarks, some far from complimentary, on the quarters and fare at the Grands Mulets. There is scarcely an instance in which the actual route to the summit is stated, and one can only

[1] *A.A.J.*, V (1945), 440; VI (1947), 452.

[2] "The High Adventure of Mr. Randall," *A.A.J.*, V (1945), 333 ff.; "The Strange Death of Dr. Bean," *Bulletin of the History of Medicine,* XVII (Jan. 1945), 101 ff.

assume that the earlier routes were by the Corridor and the later ones by the Bosses. Even Coolidge, in 1869, failed to realize that he had made the first descent by the Bosses route.

C. and J. Vallot, in notes appended to Durier's *Mont Blanc* (7th ed., 1923) give the fastest ascents known to them: *amateur,* M. Lucien Tignol, 13 September 1898 (Grands Mulets, 7.30; summit, 12.20; Grands Mulets, 3.10); *professional,* Alfred Couttet, 20 August 1910 (Grands Mulets, 2.30; summit, 7.25; Grands Mulets, 9.30). While it is not probable that the early Americans were interested in speed, they were at least in good condition; and it seems strange that, with the Grands Mulets entries available, the Vallots made no mention of Whiting and Lewis, 16 July 1870 (summit, 4.00 P.M.; Grands Mulets, 6.00 P.M.), and J. J. Storrow, 4 July 1873 (Grands Mulets, 1.50; summit, 6.45; Grand Mulets, 9.30). The first of these parties descended from the summit to the Grand Mulets in two hours; the second made the ascent in four hours and 55 minutes, and the round trip from the Grands Mulets (including halts) in seven hours and 40 minutes.

There are no entries for the two accidents of 1870 (Marke and Randall-Bean); but M. Payot has sent also the *procès-verbal* on the former, showing that Mr. and Mrs. Marke were British. This fatality did not involve Americans.

The serial numbers prefixed to entries correspond with or supplement those used for records of ascents in *Early American Ascents.* All unnumbered entries have to do either with the Grands Mulets alone or with incomplete ascents. Editorial notes are enclosed in square brackets. Identifications previously made are not repeated.

---

21. Wm. Barney, N.Y., U.S.A. [8 Aug. 1861. Signature only. W. B.: Harvard, A.B., 1859, A.M., 1864; N.Y.U., LL.B., 1865.]

[22. No entry.]

23. Aug. 24, 1861. Dr. Eckley, Boston, U.S., ascended Mont Blanc with three guides. [Probably Arthur Amory Eckley: Harvard, 1856; d. 1870. Three members of this family registered at Cascade du Dard on Aug. 31st.]

24. 27 August, 1861. Left Chamonix at 10.15 and arrived at the Grands Mulets at 4 P.M. (considered excellent time, weather magnificent,

not a cloud), conducted by the following guides: Pierre Bohren, Casper Keller (Bernois), Simond Pierre Amedet, & Balmat Michel [one of Dr. Martin Barry's guides in 1834]. A most magnificent sunset at 7 P.M., and started for Mont Blanc with the above guides at 2.25 and reached the summit at 8.15, the weather most magnificent all the way but very cold. Returned to the Grands Mulets at 11.15, making the descent in about two hours and a quarter. Left for Chamonix at one o'clock.

Charles R. Penniman, New York, U.S.A.

[C.R.P. registered at Cascade du Dard on Aug. 28th on his descent, apparently meeting his parents there.]

25. August 28th, 1862 [not 1861]. Started from Chamonix at 8 o'clock and arrived at the Grands Mulets at 4 o'clock & left here 29th at 1.30 A.M., starting for the summit at which I arrived at 9.35; left at 10.15, arrived here at 12.16, being 2 hours & 1 minute on the descent. I had as my guide François Couttet and 1 porter.

Richard A. Handeworthe

[No place of origin. This, however, is the only entry in any way corresponding to the "Allendkoc" of the French lists.]

[26. Lockwood. No entry.]

1863 [no date]. Wm. L. Matson, U.S.A. [Spent night.]

July 31st, 1864. Walter Jerome, New York.

August 15, 1864. W. Mulligan, New York; Geo. D. Bayard, America.

July 11, 1865. A. E. Fisher, Boston, Mass. Left Chamonix at 8 o'clock; arrived here 2 o'clock 25 minutes. Very little fatigued.

[27. Weld. No entry.]

28. Sept. 11-12 [not July 24], 1865. Sir John and Lady Sebright, England. [Not an American party.]

29. Sept. 1st & 2nd [1865]. Arrived here & next day went up Mont Blanc. Weather very windy & misty but cleared just as we got to the top at 11.30 & gave us a view of all the surrounding summits. Guides Joseph Simond [and one other, name illegible].

Joseph Story Fay

[J.S.F. registered at Cascade du Dard, Aug. 23rd.]

31. [Not a duplication of 29.] Mr. and Mrs. R. S. Fay, U.S.A. Sept. 4-5, 1865. Mrs. Fay spent the night upon the rock. Mr. Fay ascended Mont Blanc, leaving the Mulets at 1.00 A.M. and reaching the summit at 8.30. Guides François Couttet, F. Devouassoud. [Robert Sullivan Fay, great-uncle of S. Prescott Fay, A.A.C. Joseph Story Fay was R.S.F.'s young nephew, travelling with him.]

Sept. 4, 1865. Arrived here at 12.30 o'clock, a beautiful clear day, and splendid view. After a hearty lunch started down again.
N. W. Dodge, Wm. K. Sheffield, New York, U.S.A.

33. September 6th, 1865. John N. Isherwood, St. John's College, Oxford. [Not an American.]

34. September 6th, 1865. [The signature appears to be T.J. rather than F. J. Coolidge, but no particulars are given.]

[35, 36. Weld, Pierce. No entry.]

38. Oct. 3, 1865. Denise Charlet [wife of Sylvain Couttet] and Miss M. Brevoort, N.Y., U.S.A. Slept at the Grands Mulets Monday Oct. 2nd & ascended the summit of Mont Blanc today. They are now stopping here a few minutes on their way back to Pierre Pointue. They have had delightful weather & no accident & excellent guides & porters, whom anyone would be glad to have on such an excursion. Sylvain Couttet, Michel Devouassoud [one of Albert Smith's guides in 1851], guides; Henri son frère, Alexander Burnet, porters. [Durier says that, on the summit, champagne was drunk, a quadrille danced and the *Marseillaise* sung.]

38a. First ascension of Mont Blanc on June 21 [1866] by Eugene Terry [probably related to Roderick Terry (see 77)], of New York, U.S., and William Lawson, of Brayston, Cumberland, England, attended by Edward Cupelin and Edward Simond as guides, Joseph Cachat, Joseph Payot and Edward Benoit as porters. All of these men have been most faithful, careful and attentive. The way totally unmarked from Chamonix to the summit and hence more difficult to ascend than later in the season. They have displayed caution and knowledge well worthy of the highest commendation. Heaven's choicest blessings rest upon these faithful mountaineers. The weather has been all that could be desired and the first ascension of Mont Blanc in 1866 may be chronicled as a complete success.

Le Grand Mulet, July 16, 1866. A.M. Beckwith, Providence, R.I.

39. July 17th, 1866. Charles S. Curtis, Watertown, Conn., U.S.A., left Chamonix at 8.55 this morning for Mont Blanc with Joseph Favret and Jean Devouassoud for guides and Devouassoud Venance and Jules Lomblant for porteurs. Breakfast at Pierre Pointue, thence to Grands Mulets at 4.45 p.m. where we passed the night. A severe thunderstorm and much wind in the night. Left at 3½ next morning for the summit, where we arrived at 12 M., remaining there ¾ of an hour and returned here, arriving at 4½. Left at 4¾ for Chamonix.

August 26, 1866. Summit of the Grands Mulets. Lieut.-Col. John R. Leslie, U.S. Army, Samuel A. B. Morse, Cornelia L. Morse, William G. Morse, New York City. Walked all the way up and had fine weather part of the way up, but when we got on the glacier it commenced to snow quite hard and by the time we arrived at the top were caught in quite a storm. This Hotel is very much frequented by people visiting the Grands Mulets, also by guides. Try and get around on the first floor.

40. Sept. 4, 1866. H. P. Arnold, Boston Mass. Ascended Mont Blanc Sept. 5th.

41, 42. Grands Mulets, Sept. 14, 1866. Accompanied by Pierre Taugwald of Zermatt, and his son Pierre, Jr., we left Chamouni at 1.30 p.m. Sept. 13th. We reached the Grands Mulets at 6 p.m., had a tolerable night's rest and started at 2.45 a.m. for Mont Blanc. Carried a lantern as far as Petit Plateau. We reached the summit of Mont Blanc at 8.30 a.m., remaining there but a few minutes and then started our return, getting back to Gr. Mulets at 11.45, where we rest & lunch and at 1 descend to Chamouny. The snow was generally in good condition, and we experienced no difficulty in either the ascent or descent, except as we were inconvenienced by the severe cold. Very fine view; clear day.

John Wilkinson, Dudley P. Wilkinson, Syracuse, N.Y.

43. Sept. 15, 1866. J. Warner Johnson, Philadelphia, U.S.A., en route pour Mont Blanc. Left Grand Mulets at 3.15 a.m. (guides F. Couttet and B. Cachat), in company with Mr. C. Morison & reached the summit at eleven o'clock, slight snow having fallen during the last hour. Furious gusts with sleet, snow & hail rendered a long visit undesirable & the descent was commenced. Difficulty in keeping the track delayed us. The Gr. Mulets were reached at 6.30 p.m. after more than 15 hours very hard work. This morning up to 9 o'clock was as fine as possible.

Taking into consideration the liability to serious annoyances & danger attending the trip & the small chance for a view, the ascent of Mont Blanc is registered as one of the most foolishly spent days of my life.

Charles Morison, Philadelphia, Sept. 16, 1866. Attempted the ascent of Mont Blanc yesterday, and reached the *Summit Collidore* [Corridor], but being overcome by fatigue, and, at the same time, met by a sharp wind and stinging hail which rendered rest impossible, was obliged to acknowledge myself defeated and return to this uncomfortable, but hospitable, chateau as quickly as possible. Had I known the difficulty of the ascent, the attempt had never been made.

David Gray, Buffalo, U.S. Arrived at this point 20th September [1866] en route to the summit; stayed here a day & two nights detained by bad weather; finally was forced to start downward this morning, in the midst of a terrific storm. An utter, but honorable failure. [D. G., 1836-88: poet, editor of *Buffalo Courier;* travelled in Europe 1865-8.]

44, 45. Oct. 4, 1866. Dr. L. R. McLean & O. P. Buel, Troy, N.Y., en route from the summit of Mont Blanc for Chamonix. Left Chamonix Oct. 3d at 9½ a.m. Stopped at Pierre Pointue chalet about an hour for dinner and reached Gr. Mulets at 3.50 p.m. Left Gr. Mulets at 2.20 a.m. Reached the Grand Plateau at 5, going that distance by the light of a lantern. Reached the summit at 8.55. [LeRoy R. McLean, 1831-97: Albany Med. Coll. M.D., 1855.]

6 October, 1866. Redwood F. Warner, John Warner, Philadelphia. A most splendid day. Guides François Couttet, Edouard Simond. [Although this party went no further than the Grand Mulets, J. W. appends a long entry in French anent the remarks of his nephew J. W. Johnson (43), to the effect that, under favorable circumstance, one should not be deterred from the ascent of Mont Blanc. Warner adds that he himself had ascended the Breithorn during a crossing of the St. Théodule from Breuil to the Riffel. John Warner, 1817-73. Redwood Fisher Warner, 1819-98. Their grandfather, John Warner, was Swiss, R.F.W. married Martha Ann Johnson in 1849, and J. Warner Johnson, who ascended Mont Blanc in September 1866, was probably their nephew.]

46. July 10, 1867. J. A. Johnson, Cincinnati, Ohio. Arrived at Grands Mulets on the route to summit of Mont Blanc at 3.30 p.m. Spent the night and at 3.05 a.m. on the morning of the 11th started for the summit. Arrived there at 8.55 a.m. Left summit at 9.40 and arrived at Grands Mulets again at 12.30, safe and sound, no accidents. Guides Simon Pierre Benoit, Edward Cupelin.

Grand Mulets, July 13th, 1867. Arrived at the castle in the air at 4 o'clock p.m. where we found the most obliging Landlord we have had the pleasure of meeting since our departure from the U.S. America. We remained over night with him. Good fare, excellent beds for the weary traveler, etc. Our intention was to reach the summit, but a heavy snow storm prevented us the pleasure. Our extremely careful guides conducted us to this point in safety & return with us today the 14th inst. One of our party M.M.S. weighs 313 pounds, up to his knees every step and blows like a porpoise. Guides Stanislaus Cachat, Ferdinand Devouassoud.

M. M. Schintz, A. M. Clark, W. C. T. Brooks, U.S.A.

John A. Gardiner of California arriv'd at the Grand Hotel de la Mule July 15/'67; departed 16th.

July 15th, 1867. Having traveled now for two years I must confess that at no time have I felt so sadly disappointed as this morning when our excellent guides told us that it was impossible to go to the top of Mount Blanc because the wind was too strong. Thus returning for the first time in my travels without accomplishing my object.

Nathan Groh, U.S.A.

47. 19th August, 1867. Captain O. V. Tanner, H.B.M. Bombay Staff Corps, Cowper D. Jackson, London, Edward A. Greene, Phila., U.S.A. Made the ascent from Chamonix in 4½ hours. [Tanner and Greene] made the ascent of Mont Blanc on the 20th Augt., 1867, leaving at 2 o'c. a.m. & returning at 1.06 p.m. with the undermentioned guides: Laurent Lanier & Laurent Proment, both of them strongly recommended and inhabitants of Courmayeur. [The date corresponds and it is probable that the first name of Cowper D. Jackson accounts for the French version of "Copcutt" under which the ascent is listed by d'Arve and V. Payot. E.A.G.: wool merchant; d. 1893.]

[Between 31 Aug. and 3 Sept. 1867.] E. P. Deacon, U.S.A. Went up [to Grands Mulets].

48, 49. David W. Bishop, T. Alston Bishop, New York [and three Englishmen: R.F.T., Robt. L., F. Trevithick]. Sept. 10th, 1867. Ascended Mont Blanc. Started 2.10 a.m. Reached the top at 8.45 in a driving snowstorm. Reached le Grands Mulets at 2.45 p.m. Over 600 steps were cut in the ice by the guides: Laurent Lanier, Laurent Proment.

Sept. 10th, 1867. F. A. Starring, Chicago, Ill. Left Chamonix at 6 a.m. Started for return at 4.30 p.m., the weather looking bad with fog, hail and snow on the mountains. Mt. Blanc we must try you again and hope for better *temps*. [General Frederick Augustus Starring, 1834-1904: authority on steel production.]

Sept. 27, 1867. Dr. & Mrs. John Dean, Boston, U.S.A., with Jean & Edward Tournier as guides. A magnificent day and fine view.

49a. J. R. Blakiston, England; J. A. Beebe, Boston, U.S.A. Ascent of Mont Blanc on Aug. 1, 1868, with Cupelin, Joseph, the cook and two porters. Beautiful view. [This is d'Arve's "Recbe, J.-A., Blakston, J." James Arthur Beebe, b. 1846.]

50. Aug. 4th, 1868. W. H. Heckle, Boston, U.S.A. Left 1.5 a.m. for Mont Blanc & arrived at the summit at 7.15. Stopped half an hour for refreshment & arrived here again at 10.45 en route for Chamonix. The weather was frightfully cold but the snow was in good order. [Companions: J. C. Thompson, H. R. Robertson, Englishmen.]

[51, 52. Edward, Chase. No entry.]

Sept. 1, 1868. Mr. & Mrs. J. N. Hazard, U.S.A.

June 29 [1869]. J. Q. Carpenter of Phila., U.S.; E. A. Morrison, New York. [John Quincy Carpenter: U. of Pa., A.B., 1861, A.M., 1864, M.D., 1868; d. Rome, Italy, 1910.]

53. W. Coolidge, Exeter Coll., Oxon., & New York, U.S.A. Spent the nights of July 4 & 5 [1869] here. On the latter day we made the ascent of Mont Blanc. The snow was almost invariably up to my knees and sometimes higher. The ascent occupied 13 hours inclusive of stoppages and the descent a little over 3 hours. Arriving at the summit at 1.50 p.m. we had very little view. Guide Christian Almer of Grindelwald; porter Ulrich Almer, his son. [C., then *aet.* 19, was unaware that this was the first descent by the Bosses route.]

[54. "M. H. Ornot." No entry. Possibly the Englishman J. H. Orde, who ascended on 15 July 1869.]

July 25th, 1869. J. C. Young, Kentucky, U.S.A. Left Chamonix yesterday at 10 a.m., arrived at Pierre Pointue Chalet at 12, left at 1,

arrived at Grands Mulets at ½4. Were delayed by a tremendous rain storm which caused us to sink above the knees in the snow. Rain soon turned into violent hail storm which pelted us unmercifully. Expected to start for summit at 2, but now it is four & still raining & hailing as bad as ever. I want to start but guide refuses & doubtless he knows his business better than a novice. I have determined to remain in Chalet until weather improves or provisions give out. Shall not leave Chamonix without ascending to summit. Looking over this book strange to say I find the names of only two or three Americans who have ascended.

I was forced by sickness on the afternoon of the 26th (bad weather continuing & the lack of medicines) to return at 3 p.m. to Chamonix but design to regularly besiege the mountain next week. [No later entry.]

July 31, 1869. Edward Bowditch, J. B. Ames, Augustus Hemenway, Jr., Boston, U.S.A. 5 hrs., 20 minutes from Chamonix including halt of 35 minutes at Pierre Pointue. [E.B.: Harvard, 1869. James Barr Ames, 1841-1910: dean, Harvard law school, 1895. A.H., Jr.: Harvard, 1875.]

55, 56. August 4, 1869. Buchanan Winthrop, Robert Kelley Weeks, New York; Rev. A. G. Girdlestone, Oxford. We left the Grands Mulets at 3.15 a.m.; reached summit at 11.00 a.m., having included halts of an hour & a half. Left summit at 12.0, reached Grands Mulets 2.50. There were several inches of new snow one day old. Our guides were Michel Ambroise Payot, Edward Cupelin, Alexander Simon Desboise; porter François Auguste Cupelin.

September 1, 1869. Reached here after a walk of 5½ hrs. and made myself as snug as possible with blankets, and the cook gave me a pair of shoes only a little too small, so I put one under the bed and my feet in the other (quite a fit). We had a very good dinner for a place like this, and very good wine. We then after dinner lit our pipes, and after that went to bed, but after trying to sleep for an hour or so and not being able, we told tales and amused ourselves until we fell off to sleep. About 10 or 11 o'clock it commenced to rain and our prospects of going up to the top were small. We went to sleep again and did not get up until the next morning, when it seemed to have cleared off, but in about two hours after rained again, so we think of going down, but not without first trying to get up as near to the top as possible.

R. Grant Wilson, New York City

Thursday the 9th of September, 1869. The writer of this, John Ritchie, with two guides, Louis and François Favret, attempt the ascent

of Mont Blanc. Leave Chamonix at 7.30 a.m.; arrive at Chalet de la Pierre Pointue at 9.30. Stop there 1½ hours and eat an excellent dejeneur. En avant again at 11 a.m. About 12 strike the snow limit, or the Glacier des Bossons; cross this successfully and reach Les Grands Mulets at ¼ before 2 p.m. Dispose of some good chops here and a bottle of Moët. About 3 p.m. the sun comes out, and a glorious afternoon following. At 4 the porters of Englishmen & Frenchmen arrive down from the summit. They report the snow from one to two feet deep. On the top they experienced a driving snow storm. At 5 p.m. the whole party left for the "Lower Regions." At 7 p.m., sunset, turn in, but sleep none too much. Enjoyed listening to the avalanches. Friday 10th. All hands stirring from 2 a.m. but to no purpose. It blows a terrific gale till 12 m. Mont Blanc enveloped in mist and snow. Guides will go no higher & predict no weather fit for ascending before Wednesday next. "Sour grapes anyway," so Goodby Mont Blanc *for the present.*

John Ritchie, Boston, U.S.A. & Harvard '61.

[John Ritchie 2nd, who succeeded in ascending on 14 July 1874 (see 83).]

May 27th, 1870. Fred A. Clark, Georgetown, Colorado, U.S.A., left Chamonix at 6.30 a.m., reached Grands Mulets at 3.30 p.m. having tumbled into only one crevice or *crevasse*. At foot of G. Mulets snow was so bad that we took to the rocks & thus finished the ascent. Believing that the chances against obtaining a very extensive view from the summit of Mt. Blanc are not sufficient to justify the outlay of money and muscle required, shall return to Chamonix. Fairer views (minus glaciers) can be obtained in the Rocky Mts. of America at less cost and fatigue.

57, 58. July 16, 1870. Walter B. Whiting, Phila.; William Lewis of New York. Left Chamonix at 7½ a.m., arrived at Grands Mulets at 3.15. Will leave at midnight for the summit.

Left Grands Mulets for summit at 3½ a.m., reaching summit at 3 p.m. after a long & tedious walk. Started for Grands Mulets at 4 and reached that point at 6. [Entry embellished by emblem of Delta Psi.]

July 16, 1870. Mr. and Mrs. Robert Treat Paine, Jr., Boston, U.S.A., ascended to this Hotel & passed the night with much enjoyment. Guides Mauritz Andermatten, François Devouassoud. [R.T.P., Jr., 1835-1909: philanthropist; great-grandson of Signer of Declaration of Independence.]

29 July, 1870. John H. Appleton, Providence, R.I.; Wm. Fincke, Brooklyn, N.Y. Ascended to Grands Mulets in 5 hours from Chamouny.

Waited ½ hr. at Pierre Pointue. Guides: François Devouassoud, Alexandre Tournier; Joseph Simond, porter. [John Howard Appleton, 1844-1930: prof. of chemistry, Brown U., 1868.]

58a. 29 July, 1870. I ascended Mont Blanc today starting from les Grands Mulets at three o'clock & returning at half past twelve. I found no difficulty in the ascent beyond the exertion, but it is only right to say that I have been walking among the mountains for a month. My guides Pierre Kronig and Pierre Taugwald, of Zermatt, could not be better.

H. Torrance of New York

[Henry Torrance: b. Montreal, 1835; lived in Brooklyn and, after 1873, in Tenafly, N.J., where he died in 1910. A tea-merchant, frequently in the Orient, he is known to have made other Alpine ascents.]

Aug. 5th, 1870. O. C. Morse & Fredk. T. Blakeman, New York. Ascended to the Grands Mulets in 5 hours & ½ from Chamouny, including 1 hour's stop at Pierre Pointue. Guides Ambroise Couttet, Pierre J. Ducroz. No difficulty in the ascent. First ascent since the accident attended by the loss of Mrs. Marke & the Portier of the Grands Mulets in a crevise on the Grand Plateau. Beautifully clear weather, view of the valley of Chamouny. Left Grands Mulets for Chamouny 1.30 p.m. [No entry by the Marke party, 2 Aug. 1870, now known to have been British. Oliver Cromwell Morse: Yale, 1868.]

Aug. 10, 1870. James Biddle Cope, Philadelphia, U.S.A. Very bad weather. I ascended in a snow storm. Guide Simon Mederic; porter Jean Desailloud. [J.B.C.: U. of Pa., LL.B., 1873.]

September 6, 1870. John Jay Pierrepont, Brooklyn, N.Y., U.S.A. Ascended in 5½ hrs. from Chamouny, including 50 minutes at Pierre Pointue. Guides Edward Tournier, Michel Ducroz.

September 6th, 1870. Samuel Bowles, Jr., Springfield, Mass., Thomas Hooker, New Haven, Conn. Ascended from Chamonix in 5 hours & 20 minutes, including 1 hour and 15 minutes at Pierre Pointue. Actual time on the way 4 hours and 5 minutes. [S.B., 1851-1915: publisher of *Springfield Republican*. T.H.: Yale, 1869.]

[59, 60. Bean, Randall. No entry. Nothing appears to have been abstracted, and the two preceding entries were made on this date. Randall's entry, quoted by Durier, was made in the book of Pierre Pointue.]

August 18th, 1871. H. Whittemore, U.S.A. We had splendid weather and came from "La Pointe" in 2½ hours.

60a. Spencer M. Janney of Philadelphia, U.S.A. Ascended to the Grands Mulets Augt. 30th, 1871, and after spending quite a comfortable night (considering) started with his guides named François Ringhe, Simond Auguste and Dossi Antonio for the summit of Mont Blanc at 1.20 o'clk. a.m. on the 31st, arriving at the summit at 7¾ a.m., having lunched twice on the road and taking breakfast on summit. Made the descent (the guides opening a route that had not been before taken this year) to Grands Mulets, arriving at 10¾ a.m. He takes great pleasure in recommending his guides, but would not advise a journey to the summit without the party contemplating as willing and anxious to undergo great hardships and some danger. [S.M.J., 1838-89: railroad president and bank director.]

61, 62. July 2nd, 1872. We left Chamonix at 10 a.m., reached Pierre Pointue at 12.20, where we waited for an hour and 25 minutes for the proprietor of this hotel to join us & reached here at 4.45 p.m. The rope tied about us at 3 p.m. We met Mr. Tyndall on his descent. The weather was bright & clear till we reached the snow, where a fog came about us & continued dense till we reached here. Our guides are Peter Taugwalder & Joseph M. Perren.

July 3d, 1872. The outlook this morning from 1-4 a.m. was such that our guides thought it not one to attempt the ascent, specially as we were willing to tarry here to-day and make the ascent to-morrow. So we have been spending a most quiet day. It cleared off about 7 a.m. & proved to be such excellent weather that our guides have been regretting all day that we did not make the ascent.

July 4th, '72. *96 Anniversary of Declaration of American Independence.* The promise of a good day was excellent. We left here at 1.15 a.m. accompanied by a Frenchman [Albert van den Bossche, Belgian] with 3 guides. Halted to eat at 3.15 a.m., lantern being put out at 5.12. 3d halt on Corridor 6-6.10 a.m. Without further delay we reached the summit at 7.15. Cannon was fired at Chamonix. Stayed on summit 7.15-7.45, then descended to our 1st halt going up & ate heartily from 9.35-10.5 & starting arrived at Grands Mulets at 10.40. Total time of ascent & descent including halts 1.5-10.40 a.m., or 9 hours & 35 minutes. It was an unusually clear but unusually cold morning, the wind coming from the north & some frost bites are feelingly remembered.

Richard C. Morse, R.M. Colgate, New York, U.S.A.

Monday, 8th July, 1872. Wm. Frick, Baltimore, U.S.A.

July 25th, 1872. C. R. Levick, Philadelphia, Pa. Left Chamonix at 8 o'clk. a.m., arrived here at 2¼ p.m. Dined & started on the descent at 4½ p.m. Soft snow, not difficult but rather fatiguing. Guide a most attentive one, Pazetto Charles; porter, Edouard Bellen.

[63, 64. Kane, Graham Gardner. No entry.]

64a. August 4th, 1872. Robert B. Lea, Nashville, Tenn.; John C. Benton, Covington, Ky., U.S.A., with three guides: Bellen Marc, Couttet Joseph, Balmat Pierre; two porters: Desailloud Jean, Balmat Jean. 2¾ hrs. from Pierre Pointue *pour* Mont Blanc. Parted for Mont Blanc at 2.30 a.m. and returned to the Grands Mulets at 12 m. Journey very fatiguing and dangerous. [Robert Brinckley Lea: Yale, 1871; d. 1895. John Clemens Benton: attorney, Louisville, Ky.]

65. Ascension of Mont Blanc 10 August 1872 by Mr. H. W. Davenport. Guides: Henri Devouassoud, Edward Desailloud; porter, Jean Balmat. Snow up to the knees all the way. [On descent they were reported at Grands Mulets at 3.45 p.m. by a party of S.A.C. members.]

66. Augt. 20th, 1872. T. A. Bishop, New York. Ascended Mont Blanc; fine view. Guide François Devouassoud & a porter.

67. Made the tour to Mont Blanc, together with the guides Bellin Jean [and one other, name illegible]. August 20, '72.

S. Bower, J. Hadley

[No address given.]

68, 69. Sept. 10th, 1872. Left Grands Mulets at 3, ascending for two hours by aid of a lantern. Reached the summit at 9. Snow in fine condition, view satisfactory, but quite cold & windy. The descent is not dangerous, but very fatiguing. We can thoroughly recommend our guides Edouard Cupelin and Joseph Balmat as very efficient & careful.

Wm. W. Stuart, C.S. Withington, New York, U.S.A.

[On 9 Aug. 1902 W.W.S. made the following *Führerbuch* entry: "After 28 years, & at Peter Baumann's request, I, with great pleasure give testimony to his courage, his prudence, his ability & amiability. I employed him in '69, '72, '73, & '74 in August or in November & on high mountains such as the Finsteraarhorn & Jungfrau, and now my son is employing him on similar trips." His son, R. W. Stuart, ascended the Wetterhorn in 1902.]

70. Sept. 11, 1872. Grands Mulets. D- my eyes & the bullets the Y-s put there to keep me from going to the top. They are as "used up" as was the

Southern Confederacy

Sept. 12, 1872. Notwithstanding what I wrote yesterday, I made the ascent successfully. S.C.

[Unfortunately the name of the Confederate officer is not given. This is d'Arve's "Reuce, général."]

71, 72. D. P. Clapp, New York; Frank Learned, Pittsfield, Mass. [This is the entire entry.]

73. Friday, Sept. 13, 1872. Left Chamounix at 8 a.m. Arrived at Pierre Pointue at 10.30 a.m. Lunched there. Left at 12 m. & arrived at Grands Mulets at 2 p.m. Supped & slept there. Saturday, Sept. 14th left at 3 a.m. for Mont Blanc. Reached *summit* at 10. Left to return at 10.30 & reached the Grands Mulets at 2.40 p.m. Guides Pierre Devouassoud, Victor Charlet; porter J. Devouassoud, all excellent, skillful and attentive.

Rev. Clarence N. Buel of New York, U.S.A.

Sept. 24th, 1872. George S. Payson, New York, E. H. Linnell, Norwich, Ct., U.S.A., James Hooker Bulham, Surrey, England. Ascended from Chamonix in 3-4 feet of snow with 2 guides and one porter. Time occupied 8 hours including a stoppage of one hour at the Pierre Pointue Chalet. Dined sumptuously on 5 courses prepared by the excellent guides Joseph M. Claret, Joseph Couttet and a porter.

June 30, 1873. Wm. A. Draper, Milford, Mass., Wm. M. David, Philadelphia, Pa.

[June 30, 1873.] W. Kent Hawley, Milwaukee, Wisconsin, U.S.A. Obliged to turn back on account of heavy rains and thick weather, a sudden change in atmosphere.

74. Fourth of July, 1873. Left Grands Mulets 1.50 a.m.; reached summit of Mont Blanc 6.45 a.m.; left 7; Gr. Mulets 9.30 (déjeneur au café du Gr. Plateau). Left for Chamonix at 9.55. James J. Storrow, Brookline, Mass. Perfect sunrise & perfect view but very windy & cold. Michel Foligny, Jean Tournier, guides; Joseph Couttet, porter.

[4 July 1873.] Miss Thurston, Miss Sands, H. M. Sands, New York. Mounted from Chamonix in 4½ hours.

S. E. Sargent, Boston, Mass. July 6, 1873. Time from Pierre Pointue 2.25 hours. Left at 5, arr'd at Grands Mulets at 7.25. Splendid day. Guide Antonio Dossi.

W. P. Shields, N. Y. City, 8th July, 1873. John Sowoy, Jr., New York City.

[75. Elliott. No entry.]

[July 1873.] Joseph Wharton, Edward Chappell, Philadelphia, U.S. [J.W., 1826-1909: manufacturer; founder of Wharton School, U. of Pa.]

76. July 29th, 1873. J. T. Van Rensselaer, New York. Left Chamonix at 7.40. Reached Chalet at Pierre Pointue at 9.45 a.m. Lunched. Left Pierre Pointue at 11 & reached this hut at 1.35. Total walking time from Chamonix 4 h 4 m. Weather superb. July 30th. Night stormy; cleared up towards morning. Started for summit of Mont Blanc at 6.15 a.m. Found snow soft and walking very fatiguing. Before reaching the Grand Plateau, a driving snow storm commenced. Reached summit at 1.30 p.m. after a most exhausting effort of 7¼ hours. Not ten yards could be seen in any direction from the top! Wind and snow were blinding. Returned to the Grands Mulets hotel at 5—3½ hours from summit. I can safely say that very few guides would have taken me to the top in such weather. Nothing could exceed the skill and pluck of my two guides, and I can most heartily recommend them for the Mont Blanc excursion. In the blinding snow they seemed to find their way up the final steep slopes, as if by instinct. Their names are Henri Devouassoud and Frederic Payot; Joseph Couttet acted as porter. This hut is a comfortable place, but it is not too much to say that the fare there might be improved even on the rocks of the Grands Mulets.

77. Roderick Terry, New York, H. Mason, H. M. Wright, Staten Island. 4-5 Aug., 1873. [This is the entire entry, leaving it uncertain whether Mason and Wright took part in the ascent.]

[Aug. 1873.] Geo. Ropes, Salem, Mass.

Clifford T. Morrogh, M.D., New Brunswick, New Jersey, arrived at the Grands Mulets Aug. 14th, 1873, & left following morning for Chamonix. [C.T.M.: b. *ca.* 1830.]

[78, 79. Parker, Hoehn. No entry.]

80. August 30, 1873. Started for the summit at 3.30 a.m.; arrived there 11.30 a.m.; returned to Grand Mulet at 3.30 p.m. Guides were Cachat François, Simond Joseph, Simond Mederic and can recommend them as kind and attentive & also skillful. The ascent was very much like the above [sketch].

J. M. Fox, Philadelphia, U.S.A.

September 2nd, 1873. James M. Bruce, New York. [On same date, possibly in separate parties]: J. W. Patterson, Hanover, N.H.; H. B. Barnett and J. R. Denman, Newark, N.J. [J.M.B., 1846—, Yonkers, N.Y.: Columbia, 1865.]

Sept. 10, 1873. The fare is high and so is the price. W.L. & S.L. Kent, Brooklyn, N.Y., U.S.A.

Fred W. Manullin, New York, U.S.A. September 22, 1873. Guide Alexandre Devouassoud, who speaks English very well, and Joseph Couttet as porter.

81, 82. July 6, 1874. James B. Ayer, M.D., W. O. Moseley, Jr., Boston, U.S.A. Made the ascent of Mt. Blanc. Fine. Guide François Devouassoud, whom we can highly recommend; porter Joseph Couttet. Joined Mr. King [George King, F.S.A., of London] at this point and made the ascent with him.

The 10th day of July [1874]. Hancke Hencken, 410 East 4th St., New York, U.S.A.

83, 84, 85. Wm. H. Rand of Chicago, U.S.A., Charles E. Rand, Chicago, John Ritchie of Boston arrived at G. Mulet on Monday, July 13, 1874 at 3.15 p.m. having left Chamounix at 7.45 a.m., bound for the top. Capital climb this far. Most favorable weather, & prospects good for tomorrow. Leave Grands Mulets at 1.15 a.m. Tuesday July 14 for Mont Blanc. 3 guides and 3 porters. Fair weather—make a good start. After an hour out Mr. W. H. Rand with 1 guide & 1 porter returns, feeling convinced his health would not hold out. The rest of the party keep on. Make the Petit Plateau at 3.30 a.m.—the Grand Plateau at 4.30. Sunrise and breakfast. Make the top of Mt. Blanc at 9.45. Very much exhausted. Good view for Mont Blanc. Saw Monte Rosa Group, the Matterhorn. Made the descent in 3 hours to Grands Mulets. Guides François Cachat, Simond Joseph, Simond Mederic. Leave Grands Mulets for Pierre Pointue 3.15 p.m.

Wm. C. Benedict, Providence, Rhode Island. July 21st, 1874.

E. J. Farquhar, Washington, U.S.A. August [probably 14th], 1874.

Arrived here August 16th, 1874, and after a sleepless night started at 2.20 o'clock for the summit. Guide Ernest Paccard, et al.

T. De Witt Thompson, Frank O. Shaw, New York.

[Probably incomplete, other parties turning back on same day because of high wind at the Bosses.]

86. T. B. Peterson, Jr., Charles E. Wild, Philadelphia, U.S. Returned from the summit of Mont Blanc at 6.30 p.m. August 20th, 1874. Perfect. [T.B.P.: publisher; d. 1890.]

87, 88. Calderon Carlisle, Washington, John W. Russell, New York, made the ascension of Mont Blanc, 10 hours, August 21st, 1874. Guides Devouassoud Benoit and Albert; Favret Gustave, porter. [C.C.: legal advisor to Spanish Legation, Washington, D.C., 1896-7.]

[89. Daland. No entry.]

[Between 25 and 30 Aug. 1874.] George Biddle, Philadelphia.

90, 91. Sept. 7, 1874. Arrived this day at the Grands Mulets two strangers who came from Chamonix in four hours and a half. These strangers were accompanied by two guides and one porter and as the

summit of Mont Blanc was the destination of said strangers they stopped all night at the Grands Mulets. The fare is fair but loses out in the beds.

Sept. 8, 1874. At 3 A.M. these two strangers started with their guides and porter for the summit, which they reached at 10 A.M. Then returned to the Grands Mulets, which they reached at 1 o'clock. If any one wants two good guides and a good porter let them enquire for Edouard Cupelin and François Cachat, and for porter Jean Cachat Rosset. The first mentioned has ascended Mont Blanc thirty four times.

Wendell Goodwin, Amory C. Hodges, Boston, U.S.A.

Sept. 8, 1874. Leucy E. Seldens, Emily D. Norcross, Emily A. Means, U.S.A. Guide Folliguet Florentin and 3 others who have been very careful & kind.

May 23d, 1875. Arrived here after a rather fatiguing walk of 5 hrs. from Pierre Pointue. Weather very bad, snow & fog. Ambroise Tournier, Henri Charlet.

H. R. Whitehouse, U.S.A.

[This is the last American entry in the Grands Mulets book. Whitehouse made a successful ascent later in the same season (see 97).]

PROCEEDINGS OF THE CLUB

Secretary's Annual Report

1 December 1951

THE Club's steady growth should logically increase the ground which must be covered by the Secretary during the year and reported upon by him at the close of each year. In fact, this has not occurred. Much of the correspondence and mailing of notices has been efficiently handled by Miss Oberlin at the New York Club House. The pleasant duty of assembling notes of mountaineering activities during the year and relaying this information to members is now being carried on by the Editor of the *A.A.C. News.*

However, there has been plenty of official activity since the last Annual Meeting in New York. Meetings of the Directors have been held on March 17th in New York, on May 26th in New York, on October 6th and 7th in Barre, Massachusetts, and on December 1st in Boston. In addition, a special meeting of the Club members was held on May 26th in New York, at which two matters were happily settled: first, the adoption of the new By-Laws under which we are now smoothly operating; and, second, the termination of the separate existence of the A.A.C. Research Fund. The amended By-Laws seem to be working well and causing no undue red tape to cripple our operations as many feared would happen. The research program is now entrusted to the Club's Research Committee, with Christine Orcutt as Chairman and William Field and William Latady as Committee members.

Informal meetings of the Club have been held about every month at the Club House in New York. There has been excellent attendance at them, and interesting programs have been presented.

During the year the Club has lost by death six Active Members, namely, Alfred D. Lindley, Duncan McDuffie, Francis A. Truslow, Dean Peabody, Jr., Daniel Underhill and Mrs. Walter A. Wood. Also during the year, eight members have resigned, and five have been dropped for non-payment of dues. New members have been elected as follows: 13 in January, eight in May, eight in July and eleven in November. Hence, not counting the applica-

tions passed at the Council Meeting on 1 December 1951, our membership shows a gain of 21. The present membership is 408 Active Members and ten Honorary Members, of whom five are also Active Members, making a total of 413.

The past year will be a memorable one as it was the occasion of the first summer climbing camp organized officially by the Club. It was held at Island Lake in the Wind River Mountains of Wyoming from August 6th to August 17th, and was attended by 31 members and guests. It was a huge success, largely due to the expert planning of Oscar Cook and his Committee of Sierra Nevada Section members who arranged the outing.

As the *News* has already brought to you in more timely fashion up-to-the-minute reports of members' activities, I shall limit myself to the above report of the Club's business in 1951.

Bradley B. Gilman,
Secretary

Annual Meeting and Dinner

The 49th Annual Meeting of the American Alpine Club was held at the Hotel Shelton, 91 Bay State Road, Boston, Massachusetts, on Saturday, 1 December 1951, at 2.00 P.M.

President Hall called the meeting to order at 2.15 P.M. Just over 50 members were present.

Mr. Hall called for the Minutes of the 1950 Annual Meeting. On motion duly made and seconded, reading of the Minutes was dispensed with, and the Minutes were accepted and filed.

The Secretary then read his Annual Report, acceptance of which was duly voted.

Printed copies of the Treasurer's Annual Report were distributed, and the Treasurer discussed each item of expense and income, inviting questions from the floor. He emphasized the operating deficit of $1653.39 shown by the Report. To a question whether he expected a deficit every year, he answered, "Yes." To a question on the making-up of this year's deficit, he replied that it was paid out of unallocated capital funds. To a question whether any effort had been made to endow the *Journal,* he answered, "No." To a question whether there was a policy that the Annual Dinner should

carry itself financially, he answered, "Yes." The dinner in Philadelphia two years before had resulted in an operating profit of $.10. To a question on the advisability of raising dues, he replied that the problem was under serious consideration by the Directors and that a payment of at least $15.00 per member seemed necessary. To a question about soliciting an increase of unallocated capital funds, he answered that gifts for the purpose would be welcome. It was suggested from the floor that members be urged to increase the sale of publications. After lengthy discussion, it was (with applause)

VOTED: To accept the Treasurer's Report; to approve each item of expense paid by him during the year as shown in the Report; to approve the retention to date of securities shown in the Report as constituting the Club's present investments; and to approve the allocation of Dr. Ladd's bequest as shown in the Report.

The President stated that he was going to ask members to donate something in addition to the dues of $10.00, and that to secure any kind of balanced budget payments ought to average $17.00 per member.

The suggestion was made that the President consider appointing a special committee to report on revision of membership dues to allow some differential for age and geographical distribution of membership. No action was taken on this suggestion.

A suggestion was made that the size of the *Journal* and its printing costs might be reduced if this were absolutely necessary. The Treasurer stressed the need of securing a business manager to supervise discounts, prices, sales, advertising and other dollars-and-cents items in the field of publications. The Directors were canvassing the Club for talent available to do this important job and would welcome suggestions. Other members stressed the importance of the *Journal* as a demonstration of the Club's public, scientific and educational work. It was suggested that a possible saving in the cost of paper for the *Journal* might be made. A member suggested reconsideration of the possibility of advertising in the *Journal*. Other members suggested that the Directors might solicit gifts restricted for use to meet the *Journal* deficit, and that a special appeal for such funds might be printed at the foot of the annual dues notice.

In Miss Buck's absence, Mr. Hall summarized the Librarian's

Annual Report. To a question whether any volunteer is in sight to replace Miss Buck on her pending retirement, the answer was that no such person had as yet been found. On the motion of Miss Gest, seconded by Mr. Fritz, it was

VOTED: To accept the Librarian's Report with special appreciation of her loyal work for the Club.

Mr. Field, for the House Committee, reported that the expense of the meetings at the Club House had been carried by receipts at these meetings. He inquired whether notices of the meetings should be sent to all Club members. It is expected that members living at a distance from New York will be asked whether they wish to receive notices of these meetings or not.

The President read letters from Messrs. Odell, Hickson and others who were unable to be present at the meeting and reported a telegram from Mr. Fisher expressing his regret at his inability to attend owing to a conflict with a 60th birthday celebration.

Mr. Case reported on his conferences with General Mark Clark, head of Army Field Forces, indicating that cold weather training of troops would be increased, but that there had been little so far, because troops have been needed for action as soon as their basic training was finished, without time for specialized training in mountaineering being available.

The President reported that William S. Child had consented to serve on the Editorial Board of the *Journal* and to work with Mr. Bates in publishing numbers after the 1952 issue since Mr. Robertson would be in England on his sabbatical year.

The Secretary reported that he had received no nominations except those of the Nominating Committee, and so he announced the election of Richard L. Burdsall, Mrs. Arthur L. Erlanger and Dr. Benjamin G. Ferris to serve as Councillors for the years 1952-54 inclusive.

The President announced the appointment of a Committee to nominate Officers and Directors for action at the Annual Meeting on 6 December 1952. It consists of William P. House, Chairman; Carlton P. Fuller, Lillian Gest, Dr. Roger Whitney and George MacGowan.

In the absence of Oscar Cook, the President presented Mr. Cook's report on the highly successful camp organized by Mr.

Cook's committee and held in the Wind River Range during August 1951. Several members commented on the skillful organization of the camp.

Mr. Bates made a brief report concerning the publication of the 1952 *Journal*. He stated that the Editors were not trying to bankrupt the Club, but attempting to maintain the previous high standard of this publication and yet keep costs within the budget. On motion of Mr. Bradford Washburn, duly seconded, it was (with applause)

VOTED: To thank the two Editors for their fine work in publishing the *Journal*.

Mr. Hall commented on the likelihood of another Club climbing camp in 1953 in the Colorado area. It was suggested that an early announcement in the fall of 1952 would help to prevent conflicts with other climbing camps. In answer to a question why management of such camps was restricted to western members, it was explained that no group in the East had volunteered to do such work, and that competent volunteer management is vital to the success of the camp. Mr. Hall mentioned Mr. Cook's suggestion that a climbing camp might be supported outside the United States, but said that it was the feeling of the Council that any such camp should be run on an informal basis, rather than with the official backing of the Club, where it might compete with similar camps of other clubs.

On motion of Mr. Field, it was (with applause)

VOTED: To thank Mr. Hall and others in Boston who had assisted him in arranging the 1951 Annual Meeting.

There being no other business, the meeting was adjourned at 5.30 P.M.

After the close of the business meeting, guests were invited to join members in the large dining room of the hotel; and the enlarged audience had the pleasure of viewing a series of beautiful colored slides, accompanied by a vivacious running commentary, by Mrs. Robert L. M. Underhill, on her scrambles in the Alps in 1951. This was followed by slides and moving pictures of the American Alpine Club camp in the Wind River Range, presented by Henry I. Baldwin and William S. Child. The afternoon program was con-

cluded by an illustrated talk by Arnold Wexler on "Cross Country Mountaineering in the Canadian Rockies."

At the close of Mr. Wexler's talk, members dispersed for an hour or so before gathering with guests in the hotel dining room for the Annual Dinner. This proved to be the largest Annual Dinner in the history of the Club, attended by 74 members and 112 guests. A rough analysis of the geographical distribution of members attending indicates 39 from Eastern New England, eleven from Philadelphia, nine from New York, five from the Washington area and ten from such distant points as Colorado, Texas, Minnesota, Colorado and Ohio.

After dinner Mrs. Elizabeth S. Cowles talked most entertainingly about the Houston Expedition through Eastern Nepal to Mount Everest, illustrating her account with movies and slides taken on the trip. The evening's program concluded with an illustrated talk by Robert H. Bates on Mounts Hubbard and Alverstone.

BRADLEY B. GILMAN,
Secretary

Report of the Librarian

15 November 1950 to 15 November 1951

The additions to the Library this past year include books on Austria, Burma, Canada, New Zealand and Switzerland; on the Alps, Himalayas and Pyrenees; on mountain craft and volcanoes; and fiction. Among the very rare books you will find Petrarch's *Letters* (1492), the first printed book to contain an account of a mountain ascent (Mont Ventoux in Provence, 1336), and the only incunabulum to have such an account. There are very few copies of this book in North America. We are fortunate in having one, donated by Dr. Thorington, who has given us most of the rare books in our collection.

The number of bound volumes now exceeds 5000, the total at this time being 5063. Approximately one-fourth of this number are periodicals. Many of these publications are received on an exchange basis for our *Journal;* they now represent 53 mountaineering clubs and geographical societies.

Additions have also been made to the Lending Library. Since its reestablishment in 1950, 45 books have been loaned to eleven members. May we remind you that a list of these books is available to members upon application?

Two members of the Library Committee have continued with the cataloguing of the unbound material and prepared the cards to be typed for magazine articles and reprints. When typed, these cards will be an important addition to the catalogue cabinet, as more material will be made available for research and general information.

The new catalogue cabinet is a joy. The appeal made for this in my last report was answered by Mr. Mallinckrodt and Dr. Thorington. We are extremely grateful to them for this fine modern cabinet, which consists of three sections, each section containing 15 trays. This is now being set up with the author, shelf, cross reference and guide cards which have already been completed (about 15,000). Additions will be made as time goes on.

We are also indebted to Dr. Thorington and express our gratitude to him for many other contributions: books, pictures, prints, maps, photographs, all kinds of miscellaneous material, souvenirs for the exhibit cases, a much needed filing cabinet, and five print boxes, such as are used in art museums. We are most appreciative of the last, particularly: this is the first time the prints have been cared for properly. All have now been classified and listed, and the typed lists have been placed in a special notebook.

Although all donations to the Library have been acknowledged personally, we wish to express here, on behalf of the Club, our thanks to the various donors who have added to the attraction and pleasure of our Library.

Helen I. Buck,
Librarian

IN MEMORIAM

FORESTA HODGSON WOOD
1904-1951

Seldom in any lifetime does one meet a person successful in so many ways, so gifted and so charming as Foresta Hodgson Wood. During her full and happy days, she warmed and enriched the lives of all who knew her. Prospectors in the Yukon, classmates in school, wives of officials in Ottawa, cooks and corporation presidents, bomber pilots and Swiss guides delighted in her humor, her common sense and her lovable personality. The talented artist and sculptress, the gracious hostess of the drawing room and the wise, considerate mother was also the boon companion, the sportsman among sportsmen, the one indispensable member of each expedition.

Foresta was the perfect complement to her geographer husband, and as an expeditionary she was unequalled. When snow drummed against the tent and spirits sagged, her amusing anecdotes could make the storm a joyful occasion, while her apparently casual work with the primus made each supper memorable. Despite her apparent fragility, she had courage and endurance. For instance, at the end of a long day, I have seen her pick out her ram, kill him with a single shot, and help to skin him and pack the meat to camp. Similarly, I have seen her use a dynamic belay with speed and technique when she saw me start a slide on a steep Yukon snow slope. On Mount Wood, for instance, she never complained once about her frozen feet. Her courage was never shaken, whether she were traversing long ice slopes, travelling alone in bear country or flying in rugged mountains. In all activities she not only showed poise, but could be counted on for remarkable color photographs; in fact, she early became recognized as one of this country's finest mountain photograpers. Little wonder that for these and other reasons she was considered such an outstanding expedition member.

The St. Elias Mountains she particularly loved. She knew the thrill of being in new country, the lure of the untrodden height. Even more, perhaps, she enjoyed the beauties around her—the patches of saxifrage and red lichen on warm rocks at the edge of

a snow patch, the thrust of an icy monarch against the blue of space, the color of evening shadows on snow and of sunsets glowing on high summits above a darkened world. Many an evening she would eat her supper outside because "it was too beautiful to come in."

Foresta's expeditions to Little Tibet, to Mexico and to the St. Elias Mountains form an impressive record. But it was not the record, nor her ability to rise so magnificently to every emergency, that made her so memorable to her friends. They will always recall her warm and delightful personality, her sense and sensibility, her gentle, rare and loving spirit.

ROBERT H. BATES

DANIEL UNDERHILL
1874-1951

Daniel Underhill died suddenly on 1 July 1951 at Jericho, L. I., in the house where he was born 77 years ago. He was a direct descendant of Capt. John Underhill (fl. 1630) and Halen Kreuger. He was a graduate of Friends Academy, Locust Valley, L. I., of Swarthmore College, and of New York Law School. He received his law degree in 1896 and was admitted to the bar in the same year, soon becoming a member of the staff of the District Attorney of Queens County. A few years later he became a partner in the law firm of Davison and Underhill, practising in Brooklyn. After 1930 the firm became Underhill and Foster.

Mr. Underhill was chairman of the board of directors of the Bank of Hicksville, trustee and counsel of the Roslyn Savings Bank, former trustee of the Nassau County Trust Company and of the Glen Cove Trust Company. He was a former vice-president of the Nassau County Bar Association and a member of the board of managers of Swarthmore College. He was a member of the Religious Society of Friends.

He joined the American Alpine Club in 1922, assisting with various legal procedures in connection with its activities and attending many of its meetings. He was a member of the Alpine Club of Canada (1921), the Alpine Club (1930), the Swiss Alpine Club, the Appalachian Mountain Club and the Fresh Air Club. His climbing career began in 1920, and for several seasons he was active

in the Canadian Rockies and Selkirks. In 1922 he visited the Alps, climbing in various districts between the Graians and the Dolomites. From 1925 on he went to the Alps annually, ascending a large number of the classical peaks, among them Grand Paradis, Matterhorn (twice—once by Zmutt and Italian ridges), Zinal Rothhorn (twice), Finsteraarhorn, Schreckhorn, Monte Rosa, Lyskamm (traverse), Dom-Täschhorn (traverse), Weisshorn, Aiguille du Midi, Aiguille du Géant, Mont Blanc, Dent Blanche; high-level route, Fionnay to Zermatt. This is but part of a larger record. Underhill was a strong, conservative climber of winning personality. He went with the writer to Tyrol in 1929 and climbed the higher peaks of Stubai and Oetzthal. Later, with Alfred Streich, he was on the Wetterhorn and traversed the Aletschhorn. This was his last season. In 1938 he married Bertha Coer, who survives him.

J. Monroe Thorington

[Daniel Underhill served as Secretary of the Club, 1929-31, and as Vice-President, 1932-34. In the words of one of the tributes to him, "he was a man of sterling character and remarkable judgment —wise, modest, tolerant and kind of heart . . . and his memory will be cherished."—Ed.]

DUNCAN McDUFFIE
1877-1951

When Duncan McDuffie was elected to membership in the American Alpine Club in 1927, he had for some time ceased to be an active climber of mountains; but his interest in preserving the scenic features of the West, and particularly those of California, was at its height. Since 1923 he had been chairman of the California State Parks Council, an organization devoted to the enactment of appropriate legislation for the establishment of a state parks system for California. In 1927 this was accomplished, and McDuffie would have been one of the first park commissioners had not his sense of propriety intervened, for the appointing Governor was his partner in business. Instead of accepting an appointment he put himself whole-heartedly behind the commission, of which William E. Colby was chairman, in the highly successful work of building the system

and establishing policies for its administration. He had previously been, and continued for the rest of his life to be, one of the prime movers in the Save-the-Redwoods League. In many other ways he lent his influence and gave wise guidance to causes generally classified under the term "conservation." It was for these activities, as well as for his creative work in residential real estate development, that the University of California conferred upon him the honorary degree of Doctor of Laws.

Born in Iowa, in 1877, Duncan McDuffie came to California as a boy and was graduated from the University of California in 1899. In 1902 he participated in the Sierra Club outing to Kings River Canyon and began his mountain climbing with University Peak and Mount Brewer. In the following years he made other climbs in the Sierra and descended the Tuolumne Canyon, then a difficult feat. His two best climbs, however, were made later. In 1908, with J. N. Le Conte and J. S. Hutchinson, he made the first ascent of Mount Abbot in the course of an exploratory trip to discover a high mountain route the length of the High Sierra. In 1920 he and Hutchinson, with their packer, Onis Brown, made the coveted first ascent of the Black Kaweah.

McDuffie was President of the Sierra Club from 1928 to 1931, and again from 1943 to 1946. The latter term was accepted at a real sacrifice, for his health was impaired; yet he considered it his duty to respond to any call for the cause of conservation. His beautiful home with its terraced gardens, graciously presided over by Mrs. McDuffie, was often the scene of conferences and social gatherings of those interested in mountains, in parks, in forests, in gardens and in other aspects of natural beauty. Beauty and order and the warmth of friendship held Duncan McDuffie's attention to the day of his departure on 21 April 1951.

FRANCIS P. FARQUHAR

DEAN PEABODY, JR.
1888 - 1951

The sudden passing of Dean Peabody at the premature age of 63 leaves a very real void in the lives of all who were in any way associated with him. Although he had been a member of this club since 1929, and had served in the Thirties as Councillor and Vice-

President, it was principally in connection with his probable first love, the Appalachian Mountain Club, that one always thought of him. He was unquestionably one of the stalwarts of the A.M.C. for the last 25 years of his life. He did, however, value his membership in our club, which he well earned and maintained by a record of some eight or ten seasons of good and varied climbing in the Alps, in the Canadian Rockies and in the United States. He was a steady, determined, safe climber and a good leader, on the mountain and of his party. His leadership of people had a solid, enduring quality. People trusted him and knew that his judgment would be sound whenever his council was sought. He served the Appalachian Club first and last on almost every committee and for three years, 1928-29 and 1934, was President. He was kindly, conciliatory and wise; he could be forceful if occasion demanded but preferred the quieter approach. He liked to cause others to do what he hoped they would do, but of their own volition. One found his requests to serve with him hard to refuse, and meetings which he conducted were harmonious and worthwhile whether or not the group was always entirely in agreement.

Professionally, he had spent most of his career, since graduation there in 1910, at Massachusetts Institute of Technology. Since 1947 he had been Professor of Architecture at Harvard. He was an authority on concrete and the author of a standard textbook, *Design of Reinforced Concrete Structures*. He had prepared a short paper, "Prestressed Concrete Design Concepts," for the first United States Conference on Prestressed Concrete, held at M.I.T. the week after his death. Under his memorial portrait in the proceedings of the conference, it is stated: "Foreseeing the growing importance of prestressed concrete, he was one of the first in the United States to teach its principles."

Dean Peabody will be missed by his many friends in the Appalachian and American Alpine Clubs. Our sympathy goes out to his widow, our member, and to his family. To have known him was a happy and valuable experience. His place will be hard to fill. His personality and his example will long remain fresh in the minds of all who knew him. He was the kind of man of whom it can well be said that the world would be a better place if there were more like him.

HENRY S. HALL, JR.

FRANCIS ADAMS TRUSLOW
1906-1951

Francis Adams Truslow, our member since 1938, died suddenly of a heart attack last July. He was on his way to Rio de Janeiro with his family as U.S. Commissioner on the United States-Brazil Joint Commission for Economic Development.

After graduating from Yale and the Harvard Law School, he helped to draw up the Securities Acts of 1933 and, forsaking a private legal career in New York, accepted a wartime government position in the rubber development program in Brazil. Later he became president of the Rubber Development Corporation. In 1946 he was named president of the Curb Exchange, which position he filled until May 1951, when he was selected to head the Point Four Program of assistance to Brazil.

Frank's climbing career was modest, but covered a period of almost ten years. It began with his climbs as a young man in Colorado and the Olympics and continued through two seasons in the Alps. Most of his later climbing was in the Tetons, where he made a number of exploratory climbs and, with R. L. M. Underhill, achieved the first ascent of the southeast ridge of the Grand Teton.

After that, his enormous energy and growing ability came to be completely absorbed in a legal and business career, the responsibilities of which left him no time for mountaineering. There is no doubt that, given the time, he would have been as successful in that field as in business.

He was an ideal mountain companion, and those of us who climbed with him in the early thirties can look back on some fine experiences shared on his rope.

In addition to feeling personal loss, one can not help thinking how badly the world of today needs men like Frank Truslow and how hard it will be, in broader fields than mountaineering, to make up his loss.

WILLIAM P. HOUSE

BOOK REVIEWS

High Adventure, by Bob and Ira Spring. Text by Norma and Patricia Spring. 128 pages, 150 illustrations. Seattle: Superior Publishing Co., 1951. Price, $8.50.

The cover of *High Adventure* states that it is by "America's Outstanding Mountain Photographers." Whether one accepts this claim or not, any reader will grant that the illustrations in this picture book are exceptionally fine, certainly the outstanding photographs of the mountains of the Pacific Northwest yet to appear. We see rock, snow and ice climbing, and camps on the heights and among the flowers. The text, by the authors' wives, is chatty and "homey." It contributes feminine observations on camping in the Pacific Northwest; it supplies tips, such as the one that aluminum foil can be used instead of a fry pan for simple cooking. "Trout cooked in its own juice in foil is a gourmet's delight."

That Bob and Ira Spring are professional photographers is at once evident. Fewer illustrations, further "bleeding" and more imaginative format would please this reviewer. Still, *High Adventure* is a most attractive picture book, and should be sought especially by those who know or wish to know the mountains of our great Northwest.

ROBERT H. BATES

Going Light with Backpack or Burro, edited by David R. Brower. Foreword by Newton B. Drury. Contributions by Lewis F. Clark, Elizabeth Cowles, Alex Hildebrand, Joel H. Hildebrand, Milton Hildebrand, Mildred Jentsch, H. Stewart Kimball, Louise H. Klein, Richard M. Leonard, Bestor Robinson. 152 pages, with line drawings. San Francisco: Sierra Club, 1951. Price, $2.00.

Going Light is a "backpack manual, with notes on the care, feeding, and persuading of burros." Its purpose is "to let people know how they may enjoy wilderness trails (chiefly those of the West) without superfluous equipment and expense." This little book fulfills its purpose admirably and presents sound advice and ingenious tips on various aspects of modern wilderness travel. For instance, it reveals that your wife will not break down on the trail if you break her in

properly, and that old inner tubes can be cut up and used to advantage in pitching a tent. Above all, we learn that common sense, efficiency and knowledge can make camping a pleasure even for the uninitiated. Despite the book's interest in "those who go into the national parks and forests," old timers in the ways of camping will find it surprisingly useful. Most of the chapters, such as those on wilderness travel, equipment and camping, concern familiar subjects, but the approach is clear and fresh; more original are chapters titled "Children," "Women" and "Especially for Men." This last chapter should be made required reading in all college mountaineering clubs. Some of the advice in the book may not apply to other mountain areas, but most of it does. The Sierra Club, and David Brower in particular, are to be congratulated on this attractive, beautifully edited manual.

R.H.B.

Guide to the Appalachian Trail in New England. Third edition. xii + 432 pages, with six folding maps and five sketch maps. Washington, D. C.: The Appalachian Trail Conference, 1952. Price, $3.00.

One of the best examples of free and willing cooperation of a large number of enthusiasts is the locating, clearing, maintenance and administration of the Appalachian Trail. It is a footpath that extends from Mount Katahdin in Maine 2021 miles south to Mount Oglethorpe in Georgia. The project has been pushed through mainly by outdoor clubs located along the trail, and the work has been coordinated in recent years by Mr. Myron H. Avery. The effect of this organization in the protection of the small remaining area of wilderness from the machine age, and on conservation in general, has been incalculable.

One of the results of this project has been the publication of a series of guidebooks for the trail. The book under review is the third edition of the guide covering the trail from Mount Moosilaukee to the southern border, or the reverse, since the book gives explicit and detailed directions for a walker going in either direction, together with excellent maps of the various sections of the trail. It is in loose-leaf form so that only the necessary parts need be carried. The book also contains useful information for any walker

in the woods regarding equipment, clothing, first aid and insect pests—though the advice on repellents seems a bit out of date. The A.T. Conference is to be congratulated on having brought this useful guide up to date.

DUNCAN A. MACINNES

Mountains with a Difference, by Geoffrey Winthrop Young. A volume in "The New Alpine Library," edited by Arnold Lunn. 282 pages, 14 illustrations. London: Eyre and Spottiswoode, 1951. Price, 18/-.

All who know *Mountain Craft* and *On High Hills* are sure to want to read *Mountains with a Difference.* Here, as the author explains in a Foreword, are "stories of some of the different aspects" in which mountains have appeared to him. The greatest single "Difference," a reader is bound to conclude, was the one brought about by a shell in 1917. Geoffrey Young was serving on the Isonzo front, with the First British Red Cross Unit for Italy; he was called, in a citation which he does not quote, "mirabile esempio a tutti di coraggio e di filantropia."[1] During the assault on Monte San Gabriele, he was severely wounded in the left leg, which had to be amputated above the knee.

The earlier years had been, as he calls them, "golden." In this book he supplements what he wrote in *On High Hills* by recalling mountains and friends in Wales, Ireland and Scotland, and by telling of a pilgrimage to Troy and Mount Ida. The chapter about climbing "As It Was in Wales" makes a memorable introduction. With greatly-gifted friends, Geoffrey Young delighted in the richness of life lived fully and harmoniously—"No spirit feels waste,/Not a muscle is stopped in its playing . . ." (Browning's David comes thus irresistibly to mind; and, in the next moment, lines in Geoffrey Young's own *Freedom* that make clear his deep enjoyment of rock and pool and sun.) "I climbed all my life only for enjoyment," he writes, "and abandoned myself to it. If I learned much of value to my life by the way, it was without intention."

[1] *A.J.*, XXXI (1917), 339. It is interesting to read—after Chaps. V and VI of *Mountains with a Difference*—G.M. Trevelyan's *Scenes from Italy's War* (1919), and then to turn to Book I of Ernest Hemingway's *A Farewell to Arms.* Same battlefront, same sort of work; but how unlike Hemingway's character Frederic Henry were G.W.Y. and the author of the great Garibaldi books!

After 1917 Geoffrey Young contrived a really useful "peg" (his own term)—and returned to the hills. "Instead of a downhill progress," he decided, "I could make a progressive uphill fight of the last phase." Here was a spur to new achievement, to efforts that would quite distinctly *not* be mere repetitions of those already carried to a high point in the past. (Wonderfully Browningesque, again: "Strive, and hold cheap the strain!") He studied different principles of motion and balance; he adjusted his ideas of pace; he pressed himself toward understanding of fatigue. In 1919 he climbed the Gashed Crag on Tryfan and "made some dignified ascents in the Lakes." He kept on. Some of the old friends were gone; others, who had come through, were with him again. In 1927 he again watched dawn breaking over the snows of the Valais. He climbed Monte Rosa that year. More Alpine ascents were yet to come. His last was in 1935: the Rothorn. On the summit he decided that this was to be the last; on the way down he experienced a serious fall; as the party descended to the valley, in darkness, he meditated further on his decision and found it right.

A "Difference," yes. How can one think of it otherwise? And yet the abiding impression in a reader's mind is less of difference than of oneness. It is perhaps not quite fair to apply to a writer words that he has used himself in praise of others. Just the same, Geoffrey Young *is* one of those "men who had the great heart and stayed valiant into age."

D. A. Robertson, Jr.

Walking in the Alps, by J. Hubert Walker. xii + 274 pages, with photographs and maps by the author. Edinburgh and London: Oliver and Boyd, 1951.

"How does one set about an Alpine journey? How is a man who has never been to the Alps to find out where to go and what to do when he gets there?" The next time a friend asks you, this is the book to send him. You yourself will refer to it when you decide that it is no longer desirable to be a centrist. It covers the Alpine watershed from western Switzerland (Great St. Bernard) to the Brenner Pass. Nothing of the French Alps is included, so that while the Central and Eastern Pennines are described, the Western Pennines

(chain of Mont Blanc) fall outside the scope of the book. There is nothing of the Bernese Oberland, nor of the Tauern groups east of the Brenner. It is hence limited to the Swiss-Italian Pennines, the Lepontines (including Ticino), the Bernina (including its west wing, the Bregaglia), the ranges of the Ortler, Stubai and Oetz valleys, with the massif of the Lombard Alps (Adamello, Presanella, Brenta), rising opposite and south of the Tonale Pass.

There are many courses to this feast, in a beautifully arranged and illustrated volume, almost miraculously free of misprints. A good deal of geography is included, for the pedestrian must understand his terrain if he is to enjoy free and easy traverse of the ranges, commonplace in the days of such pioneers as F. F. Tuckett and once again coming into fashion. It is a selective guidebook, analyzing topography, circling the various ranges with high-level walking lines and higher peaks thrown in when they are favorably placed. The present reviewer has walked or climbed in all the areas described. Every page opens new vistas or awakens memories of former pleasures.

J. Monroe Thorington

Undiscovered Scotland: Climbs on Rock, Snow and Ice, by W. H. Murray. viii + 232 pages, with 24 photographic illustrations and 14 maps and diagrams by Robert Anderson. London: J. M. Dent and Sons, Ltd., 1951. Price, 18/-.

Those who have read Mr. Murray's *Mountaineering in Scotland* will find here most of the same qualities and virtues. Descriptions are always vivid: great mountaineering experiences and moments of quiet beauty are realized with equal keenness. As the title suggests, the author in this book frequently wanders afield from the better-known Scottish peaks. He tells of many ascents of the same high grade of difficulty and excitement as in his earlier work—perhaps not quite so many, but enough. There is a fine ice route, for instance, undertaken to give Tilman, intimate with the world's greatest peaks, a sample of the Scottish hills in winter. It drew from that laconic mountaineer the comment, "This climb is an eye-opener." And there is a thrilling "suspense story," with the climbers moving for a long period down difficult rock, in continual danger of annihilation from

avalanches. In other chapters, Murray shares with us the various gentler pleasures to be had among, as well as on, mountains. Here the mysticism implicit in his earlier writings frequently becomes explicit, and to this reader is rather less effective, for that. But all in all the book is a thoroughly enjoyable collection of climbs and mountain experiences.

ELIZABETH KNOWLTON

The Scottish Himalayan Expedition, by W. H. Murray. xiii + 282 pages, with 36 photographic illustrations, including four in color, and 11 maps and diagrams. London: J. M. Dent and Sons, 1951. Price, 30/-. (New York: Macmillan and Co.).

To the annals of the Himalaya is added another account of a highly successful small, light expedition. Its object was both mountain climbing and exploration in the Kumaon between Nepal and Kashmir on the border of Tibet. The story is ably told by the author, who recounts in straightforward style the problems encountered in travelling 450 miles with three companions in this mountainous area. Nine specific peaks were attempted with five ascents—the most difficult being Uja Tirche (20,350 ft.), a first ascent that involved real mountaineering skill. One is impressed with the resourcefulness of the party in surmounting without outside or official help the enormous human and diplomatic problems of obtaining transport along the little travelled route of the Himalaya. One senses, too, that the members of the party really liked the people, even when they put obstacles in their way, and that they learned a great deal about the country.

The book is well illustrated with good black and white photographs and four excellent color plates which, with the description of the journey in the text, give the reader a vivid picture of this interesting area. The detailed breakdown of expenses as well as the discussion of equipment and other details of planning will be of value to other mountaineers interested in tackling the Himalayas economically without the organization of a large party.

WILLIAM P. HOUSE

Nanda Devi: 3e Expédition Française à l'Himalaya, by J.-J. Languepin and L. Payan. Photographs by J.-J. Languepin, L. Gevril and A. Barbezat. 72 pages of illustrations of which ten are in color, with 19 pages of commentary in French. Paris and Grenoble: Arthaud, 1952.

This attractive volume presents a vivid and exciting pictorial account of last year's tragic French expedition to the 25,660-ft. Garhwali peak. In the first of three sections M. Payan briefly describes the overall plan, the approach, the attack on the main peak, in which Roger Duplat and Gilbert Vignes disappeared, and the ascent of the East Peak. In the main portion the pictures speak eloquently for themselves. Of extraordinary beauty, often highly spectacular, they are extremely well reproduced and give a clear impression of the region and of what the expedition actually did. In the final pages M. Languepin fills in many details with brief commentaries on each photograph and with diagrams.

The expedition followed in the footsteps of the British-American Himalayan Expedition which in 1936 successfully climbed the main peak. The French climbers were even plagued by a coolie strike at the identical spot where the 1936 group had been. Camps on the mountain were established apparently in the same sites as previously. Finally, on June 29th, Duplat and Vignes left Camp IV, heading for the summit, never to be seen again. To one familiar with the mountain, their plans seem overambitious if not foolhardy. Carrying the barest essentials for a bivouac, they hoped to climb the main peak, to traverse the two-mile-long ridge leading to the East Peak, all of which lies above 22,750 ft. and presents climbing difficulties, and to descend from the East Peak to Longstaff's Col along the route used by the Poles in 1939! A support party established a series of camps above Longstaff's Col, pushing on continually higher in hopes of finding the climbers, until on July 6th they finally made the second ascent of the East Peak and realized that their companions were not to return. Throughout the pages of the book you admire their courage but do wonder whether the French are carrying on the unfortunate do-or-die attitude towards mountaineering of the pre-war Germans.

H. Adams Carter

Tirich Mir Til Topps, by the Norwegian Himalayan Expedition. 176 pages, with 54 half-tone illustrations, four color plates and three maps. Oslo: Gyldendal Norsk Forlag, 1950.

This is the official account, in Norwegian, of the first ascent of Tirich Mir in 1950 by a party of nine Norwegians and a British officer stationed in Chitral. The 14 chapters are by eight different members of the expedition, and the foreword is by Professor Morgenstierne. The story is told simply, without embellishments other than the excellent photographs.

Following a reconnaissance in 1949 by two Norwegians (who almost reached the top), the main party set out early in 1950. Preparations and testing of equipment were thorough. The climbers were selected after lengthy examinations, including exposure in low pressure chambers. Primus stoves were modified to operate at low atmospheric pressures. Sunburn cream was subjected to spectroscopic tests, and the caloric value of all food was determined. No doubt the success of the expedition was due in part to the extremely careful attention to details.

The use of ski poles all the way to the top lent a typically Norwegian touch. Climbers used them to steady themselves in deep snow and to lean on when they were resting with heavy loads. Each climber carried two adjustable metal ski poles. Skis were not used. In the chapter on assessment of results, there is unanimous agreement that ski poles were highly advantageous. Perhaps this conclusion will be of interest to future expeditions to snow mountains.

Multiple authorship carries certain disadvantages in so far as the unity of narrative is concerned, but it does not impair the interest in the present book. Furthermore, one can read a chapter on equipment alone and find a complete discussion of just that. The lists of medicines, however, might well have been relegated to the appendix.

Tirich Mir Til Topps follows the pattern of many expedition accounts: preparations, journey to India, polo with local potentates, trials with packers, group photograph of the bearded members of the party—all in the tradition of mountaineering books. But this report has its own freshness and vigor, which have made it the best seller in Norway since *Kon-Tiki.*

HENRY I. BALDWIN

China to Chitral, by H. W. Tilman. xi + 124 pages, with 69 illustrations and four maps. New York: Cambridge University Press, 1952. Price, $4.75.

The master traveller and master baker recounts in delightful fashion how he and Shipton failed to climb two mountains in Central Asia. In his wanderings with Kirghiz, Tungans and Wakhis, we see him assaulted, chased and insulted, but never worsted. He seems equally at home boiling his tea over a yak dung fire in the desert, sharing a miserable Karatash hovel with dogs, lambs, calves and 15 Kashgarians, or playing Asiatic versions of chug-a-lug with Chinese overlords. "Beyond Aqsu all is desert; and that night as I lay upon its slightly heaving surface a Chinese general in an embroidered cap danced across it eating chrysanthemum petals with a wooden spoon."

China to Chitral describes little mountaineering and lacks unity, but it has vitality and verve. In it one of the great travellers of our times recounts with pawky humor and greater realism than Marco Polo the life of a modern wanderer in Central Asia. Othello was a Mr. Milquetoast compared to Tilman, and his stories to Desdemona would have fallen flat had Tilman been on hand to tell of *his* "antres vast and deserts idle . . . and hills whose heads touch heaven."

ROBERT H. BATES

Mountains of Tartary, by Eric Shipton. 224 pages, with 30 illustrations by the author, one sketch map and end-paper maps. London: Hodder and Stoughton, 1952. Price, 20/-.

This is a fascinating account of exploration, hunting and climbing in Sinkiang during the author's service as British Consul-General at Kashgar, 1940-42 and 1946-48. The journeys to and from his post were adventures themselves: in via Gilgit, Hunza and Tashkurghan; out through Tashkent, Soviet Turkestan and Iran; in again over the Saser and Karakoram Passes, an ancient trade route which in places shows no vestige of a trail, save bones of horses and camels, 15% of which perish on the high climbs; a farewell exit via the Mintaka Pass and Hunza Valley in flaming autumn colors.

The book tells about the Shyok ice dam; the Turfan Depression, far below sea level and farther from the sea than any other point

on earth; a thousand-mile lorry trip from Kashgar to Urumchi; hospitality of Kirghiz and Khasaks; hunting ibex, ovis poli and ram chicor; rebel bandits; arrests by Chinese soldiers; and, above all, mountaineering. Shipton climbed the second highest Bostan Terek peak near Kashgar, coming down by a hair-raising glissade. He was joined by Tilman in attempts on Muztagh Ata, Bogdo Ola and Chakragil. For various reasons (frostbite, lack of time, sickness of porters), the summits of these great peaks were not attained, but the way is shown for future climbers.

RICHARD L. BURDSALL

Beyond the Southern Lakes: The Explorations of W. G. Grave, edited by his daughter Anita Crozier. 124 pages, with illustrations and sketch map. Wellington, N. Z.: A. H. and A. W. Reed, 1950. Price, 12/6.

Farthest West, by A. H. Reed and A. W. Reed. 192 pages, with illustrations and maps. Wellington, N. Z.: A. H. and A. W. Reed, 1950. Price, 12/6.

These two books cover small sections of the rugged Fiordland of the extreme southwestern section of the South Island of New Zealand. Well written, they make enjoyable reading. They will be appreciated most of all by those fortunate readers who have themselves back-packed ("swagged," as they say in New Zealand) in comparable wilderness areas, like that of the Coast Range of British Columbia. The good illustrations and maps greatly increase the interest; the simple, straightforward style makes both books very appealing. Both are very obviously, and without pretence, the "real thing."

Beyond Southern Lakes covers twelve seasons of exploration and climbing, between 1897 and 1931, by W. G. Grave and various friends, in the area from Lakes Te Anau and Wakatipu through about 50 miles to the sea from Bligh to Milford Sounds—undoubtedly one of the roughest thousand-square-mile areas in the world. Annual rainfall of 200 or more inches on the coast, sand flies, dense vegetation and often impassable cirque valley walls, all combine to hinder the explorer laden with heavy swags and soaked through for days at a time. Passes, rather than peaks, occupied most of the energy of Grave and his associates; but there were several first ascents,

including in 1925 Mount Christina (8675 ft.), the second peak in the district. Tutoko Peak (9042 ft.), the highest, was twice attempted unsuccessfully. One is constantly impressed by the capacity to "take it" of Grave and his companions—mostly men occupied for the rest of the year in more sedentary pursuits.

Farthest West tells of the crossing from Lake Manapouri to Dusky Sound by A. W. Reed (age 42) and his uncle A. H. Reed (age 74!) in eight days from 24 February to 3 March 1950. They covered 20 of about the hardest miles imaginable: climbing hundreds of feet to circumvent a hundred-yard bluff—almost mired in a swamp —fording streams—fighting up through dense woods. Of the third day, when they were on top of 3500-foot Murrell Pass, the uncle says, "It was an enchanted land, and we were there alone." All who have been in similar places will know exactly how he felt. The descent was, in places, hair-raising. Finally, they reached Supper Cove and met the 70-foot M.V. *Alert,* in which they had arranged to sail up the coast to Milford Sound. They sailed generally inside, and touched at several points visited by Captain Cook in the late 18th century; but for short stretches they were in the open sea. Among their fellow passengers were Mr. and Mrs. Willard Helburn, of Boston. From Milford Sound they went through the not entirely finished Homer Tunnel, which has now unfortunately displaced the foot journey over the famous Milford Track past Sutherland Falls, and then by bus down Hollyford Valley to Lake Te Anau, back to Lake Manapouri, and then to Dunedin. That a man of 74 could pack over such tough country without any lasting ill effects —and such a feat is evidently not uncommon in New Zealand— gives evidence of the relatively simple and normal lives still led by many people in that country.

H. S. Hall, Jr.

Return from the Pole, by Frederick A. Cook. Edited, with an introduction, notes and bibliography, by Frederick J. Pohl. 325 pages, illustration, map. New York: Pellegrini and Cudahy, 1951. Price, $4.50.

In all the annals of exploration there is recorded no more prolonged and bitter controversy than the tempest generated over the claims

of Frederick A. Cook and Robert E. Peary to the attainment of the North Pole. The most recent contribution to this unhappy chapter of geographical accomplishment, *Return from the Pole,* was finished by Dr. Cook shortly before he died in 1940; and thus—since Peary died in 1920—the last word has now been said by the principals concerned.

The book has been edited by Frederick J. Pohl, who has also provided an introduction to Cook's text in the form of a review of claims, contradictions, arguments and rebuttals affecting Dr. Cook's integrity. The mountaineer will be interested—but not impressed—at the appearance of the ghost of Mount McKinley to testify on Cook's behalf. He will find Pohl's "supporting" evidence shaky in the extreme, and the championing of Dr. Cook's claims would have been far stronger had the Denali episode been omitted.

The critical reviewer of *Return from the Pole* will constantly seek geographic data upon which to evaluate the veracity of the text. There is little to be found. In fact, vague description is a characteristic of the narrative, until Cook has left the polar pack and penetrated the archipelago. Two points, however, are worth mentioning.

In *My Attainment of the Pole* (New York, 1913), Cook describes his landfall in Peary Channel as including a view of the mountains of Axel Heiberg Land to the eastward. He plots his route to pass close to—if not across—Meighan Island, which he failed to report, leaving its discovery to Stefansson eight years later. Pohl does not help Cook here, either, for he suggests that what Cook saw to the east was Meighan Island, not Alex Heiberg Land. The reviewer has seen both features, and it would be quite impossible to confuse them. Axel Heiberg Land is characterized by Alpine-type ranges, whereas Meighan Island is so low-lying that its small, slightly arced ice cap rises no more than a few hundred feet above the sea.

En route to the Pole, Cook reports the discovery of "Bradley Land," an island some 30 miles long and 1000 feet high. Pohl correctly suggests that substantiation of this "discovery" would go far to support Cook's claim to having reached the Pole. The reviewer spent some three hours of aerial reconnaissance on a clear day scouring the area defined by Cook, but failed to detect a single feature that would suggest the presence of land.

Happily, the matter of who first attained the North Pole is no longer of more than historical significance. The average reader of *Return from the Pole* can therefore afford to minimize the emotional aspects of controversy and center his attention on a vivid and strongly-written description of a very great journey, carried out and made successful only by the seizing and adapting to human needs of every conceivable device that ingenuity could summon towards survival. Dr. Cook may not have reached the Pole, but no one can deny that the 14 months during which he travelled at least 1400 miles embraced one of the great epics of polar exploration. Let this fact be the basis for reading *Return from the Pole,* for the scholar and student of the polar controversy will derive little from the text, or from Mr. Pohl's arguments, to aid him in proving who first reached the "Great Nail."

WALTER A. WOOD

One Green Bottle, by Elizabeth Coxhead. 281 pages. London: Faber and Faber, 1951. Price, 10/6.

Here at last is an English-language novel completely centered on climbing and written by someone who obviously "knows her stuff." In this case, it is climbing of a highly specialized sort—rock climbing in Wales. The story, told with frank modern realism and a good deal of humor, is about Cathy Canning, a rough, tough, amoral little guttersnipe from the Liverpool slums, and how she eventually develops into a fine, strong person through her experiences and her relationships with others in climbing.

Unfortunately, I find myself unable to give a proper critical estimate of style, plot and delineation of character—except for my irritation at an unsatisfactory ending, I was enjoying myself too much to notice them! My intense interest was all in the climbing. There is rock work of every sort here, from the frequent humors of bouldering and taking out novices, to the high exhilaration of leading a "Very Severe"; and there is climbing in all weathers—sun, rain and mist, wind, snow, moonlight. Miss Coxhead observes sensitively and describes vividly the details of fact, sensation and mood; any follower of the sport can enjoy continually the pleasures of recognition. The indoor setting—a Welsh Youth Hostel full of climbers, all com-

pletely concentrated on their ascents, but good-humoredly ready to befriend strangers equally interested—is also most familiar to anyone who has stayed in similar, if perhaps less economical, British centers. The whole climbing atmosphere of the book is lively and authentic.

ELIZABETH KNOWLTON

Himalayan Assignment, by F. Van Wyck Mason. 282 pages, with sketch map end-paper. Garden City, N. Y.: Doubleday and Co., 1952. Price, $3.00.

This is a lurid tale of a political mission to darkest Jonkhar (between Nepal and Tibet) by a strong, silent U. S. Intelligence Officer, Colonel North. It contains all the usual ingredients of mystery and horror and some extra local ones. We have two heroines, both with remarkable physical attributes which are never left to the imagination. After a neck-to-neck race for the hero's favor, the snowy-haired young Esthonian baroness is defeated by a blue-blooded inhabitant of Back Bay, who flies triumphantly back with him to safety and love. The villains include a renegade U. S. general, an assortment of Russian and Chinese Communist agents, a pseudo-zoologist, a Nepalese Rajah. All these characters have incredible physical endurance and can perform feats with any kind of firearm which would put William Tell completely out of action. Besides a variety of violent deaths, the breathless reader takes part in a monumental landslide, native sacrificial rites entailing rivers of blood, escape from a Tibetan prison by means of a pair of cotton pants and two garter catches, and a final showdown on a Himalayan pass in November without axes, ropes or adequate food. The pleasantest character is a loyal Gurkha lieutenant, who is inexplicably forgotten when the hero flies away.

The wild mountain valleys and the savage beauty of Nepal and the Tibetan scenery and local color of Jang are well done. They would make much better reading without the impossible story to which they form the background.

URSULA CORNING

BRIEFER MENTION

Leslie Stephen: His Thought and Character in Relation to his Time, by Noel Gilroy Annan. 342 pages, with 11 photographic illustrations. Cambridge, Mass.: Harvard University Press, 1952. Price, $5.00.

Mr. Annan, whose primary themes are indicated by the subtitle of the book, devotes about ten pages to Stephen as a member of the Alpine Club and the Sunday Tramps. Read in context, these pages sharply illumine Stephen's character as Annan conceives it. Here is a single-minded climber who found in mountaineering "a chance to announce to the world that, like Carlyle, he had proclaimed the Everlasting Yea," and a sentimentalist who disguised the emotional quality of his Alpine memories by being brusque or by making (bad) jokes. The author is a Fellow of King's College, Cambridge; for better or for worse, he has never been of a mind, one gathers, to join the Cambridge Mountaineering Club. Readers who admit to a liking for *The Playground of Europe* may find themselves turning from Annan, not without gratitude for what he reveals, to a happier brew compounded of the *A.J.* and Maitland and Virginia Woolf's essay "My Father: Leslie Stephen."

D. A. R., Jr.

The Dolomites, by C. Douglas Milner. xiv+105 pages of text, 150 photographs by the author (including colored frontispiece), six map-diagrams and end-paper map. London: Robert Hale, 1951. Price, 25/10.

This is one of the loveliest illustrated books recently published on the Dolomites. The illustrations are excellent. The author not only does justice to the mountains, but also shows many views of villages and towns. His pictures convey the atmosphere characteristic of the region, and the text supplies a good introduction to its history and to its charms for the walker and climber. The book is highly recommended to those who have visited the Dolomites and to those who contemplate making a visit there.

Hans Kraus

Austria. Grieben's Guide Book 234, with English text. Vienna and Heidelberg: Verlag Carl Ueberreuter, 1951.

This guidebook to Austria, than which it is scarcely possible to imagine a better, supersedes the older Baedeker. Climbers will be impressed by the excellent maps and by the exhaustive, 18-page list of the huts and refuges in the Alpine areas. The regional groupings not only of huts but also of ski-lifts and mountain railways will help the mountaineer to become oriented rapidly. In the back of the book there are strip maps for the motorist. Among the data brought up to date are those concerning post-War Vienna and the Gross Glockner Road.

J.M.T.

The Book of Austria, by Ernst Marboe. Translated by G. E. R. Gedye. 544 pages, profusely illustrated (many color plates). Vienna: Oesterreichische Staatsdruckerei, 1948.

Said to be the best book on Austria made since the War, this is a pictorial delight, resembling in make-up the volume on Switzerland by Ogrizek and Rufenacht. It is divided into three parts: 1, "History"; 2, "Land, People and National Costume"; 3, "From the First to the Second Republic." The story of Austrian art and civilization, running through the whole book, gives a comprehensive picture of the country's history and genius. Pictorial maps illustrate the chapters on the provinces. Unfortunately, the translation falls short of perfection.

J.M.T.

Glückliche Tage auf hohen Bergen, by Walter Schmidt. 326 pages, with 106 photographic illustrations by the author and an index. Bern: Verlag Hallweg, 1951. Price, $4.65.

The author of the readable *Komm mit mir ins Wallis* and *Rendezvous in Zermatt* has now written a fine account of his adventures on the highest peaks of Switzerland, chiefly in the Valais, Bernese Oberland and Graubünden. He is not so obsessed by eternal snow as to neglect the flowers below the huts or the ravens circling the crevasses, and the heavy rucksack is lightened by a flow of pleasant reminiscences. The photographs are excellent. Several peaks are

shown from different points of view—which means that the reader enjoys an almost three-dimensional effect.

J. M. T.

Glarnerland, by Hans Trümpy. 135 pages, 80 full-page photographic illustrations by Walter Läubli. Glarus: Verlag Tschudi. Price, $6.25.

The Canton of Glarus, known for its splendid peak, the Tödi, lies east of the St. Gotthard road. Its main valley, the basin of the Linth, is cut off from the other cantons by high ranges. Although accessible from Zürich by way of the west end of the Lake of Wallenstadt, it is nevertheless unfamiliar to many climbers. The present volume presents the beauty of the canton in pictures, with adequate text. The arrangement of photographs in sections, with all titles at the back of the book, makes it somewhat difficult to find out what is what.

J.M.T.

Volkserbe der Schweiz. Six volumes in a series under this general title. Basel: Urs Graf Verlag, 1943-46. Price, $4.50 each.

Each of these six volumes deals with a separate canton. They are finely illustrated and, though they are not of the same series, uniform with *Glarnerland*. *Tessin,* by Titus Burckhardt, describes subtropical Ticino, Switzerland's largest territory south of the Alps. In *Wallis* the poet C. F. Ramuz does full justice to the Valais. W. Kern devotes two volumes under the title *Graubünden* to the drainages of the Inn and the Rhine within this canton. H. P. Klauser's *Appenzellerland* describes the dairy country of northeastern Switzerland, with its costumes and huge bells. *Uri,* by Leonard von Matt, covers the small canton east of the Lake of Lucerne, known for its association with the legend of William Tell.

J.M.T.

Val d'Hérens, by Paul Budry (French text) and Franz Baeschlin (German text). 16 pages of text (with the two languages in parallel columns), 76 illustrations. Neuchâtel: Editions de la Baconnière, 1951.

Here is the first of a series of small books about various areas and regional customs of Switzerland. The Val d'Hérens extends south-

ward from the Rhone Valley at Sion and reaches its highest and best-known center, Arolla, close to the Italian frontier. In the Middle Ages the Col de Collon was a smugglers' route from the Valpelline to the Val d'Hérens. In the shorter, eastern branch of the valley, the hamlet of Ferpècle lies below the Dent d'Hérens, which pilgrims of bygone years passed on the way from Zermatt to Sion for protection against the Black Death. The women of the valley still wear the old costume in their daily work in the fields; and there are nodding flowers, chamois and sometimes spring cow-fights against the backdrop of Mont Collon.

J.M.T.

Gelände und Karte, by Eduard Imhof. 255 pages, with 343 photographic illustrations and sketches in the text, followed by 34 plates in color. Erlenbach-Zürich: Eugen Rentsch Verlag, 1950. Price, $5.75.

The mapping of Switzerland on the great scale of 1:25,000 has now been completed, and the present volume is designed for military instruction in cartography. It will be of surpassing interest also to the mountaineer—indeed, to all who wish to know about modern methods of map construction. Among the subjects included in the first section are perspective, sketching, orientation, projection and stereoscopic interpretation. There follows a discussion of various techniques for representation of the earth's surface. One is introduced to compass traverse and the use of a map by pedestrian, skier, rider and soldier. Several of the final plates are anaglyphic, colored spectacles being supplied in a pocket of the back cover.

J. M. T.

Die Jagd in der Schweiz. Two volumes, 297 and 295 pages, each volume containing 80 photographic illustrations, eight color plates and numerous sketches. Geneva: René Kister (French edition), and Winterthur: Gottfried Schmidt (German edition), 1951. Price, $25.00.

In two magnificent volumes, in which many authors collaborated, the history and present state of Swiss venery are presented as never before. The first volume deals with animals in nature, including

avifauna—their biology, anatomy and diseases. It continues with a discussion of hunting methods as applied to individual species, and ends with a section on protection and conservation. The second volume treats weapons, their care and use, and hunting dogs. The second half touches on such diverse subjects as the evaluation of trophies, wild animal photography, the Swiss National Park, hunting in art and history, and the organization of hunting rights. Aside from the excellence of the photographs, which thoroughly cover Alpine game, one is delighted by the color plates, some of which are reproduced from ancient illuminated manuscripts such as Gaston Phoebus. The entire work is carefully indexed.

J.M.T.

Holz Bemalen, Kerb Schnitzen, by Christian Rubi. 135 pages, profusely illustrated by drawings and photgraphs, with several color plates. Bern: Verlag Hans Huber, 1951. Price, $3.25.

The Bernese *Heimatschutz,* which encourages the perpetuation of old techniques, is largely responsible for the production of this book. Christian Rubi, well-known head of Bern's school of woodwork, gives a lucid introduction to simple wood carving and painting, in which many ancient patterns are preserved. Full directions are provided as to tools and materials.

J.M.T.

Hausinschriften im Schweizerland, by Gilgian Maurer. 272 pages, with 350 illustrations, two in full color. Spiez: G. Maurer, 1951. Price, $4.20.

In 1899 Walter Larden, a member of the Alpine Club, began to collect house inscriptions, chiefly of the Lötschenthal. Later he published them in a modest book, now almost forgotten. This new volume, already in a second edition, continues the project and covers many districts of Switzerland, forming an anthology of homely precepts recorded in carving and painting through the centuries. The words reveal the thoughtfulness and the humor of bygone days; the manner of the inscriptions shows the innate peasant skill through which artistic craving found expression.

J. M. T.

Giovanni Segantini, by Hans Zbinden. Schweizer Heimatbücher 43/44. 60 pages, with ten plates in color and 31 in monotone. Bern: Verlag Paul Haupt, 1951. Price, $2.25.

Although the artist Segantini is forever associated with the Engadine, he was Austrian by birth and received his slight training in Italy. Yet in his short life (1868-99), much of it in poverty, he painted the immense broken-color studies that culminated in the triptych "Werden, Sein, Vergehen," a triumph of Swiss mountain painting and the glory of the Segantini museum at St. Moritz. The Maloja was his workshop and his last resting place. His early death was due to exposure and the peritonitis that followed a ruptured appendix—a generation too early for the surgical skills which might have saved him. This book makes evident the grandeur and nobility of his purpose.

J. M. T.

Ernst Hodel: Das Werk eines Malers, by F. Balsiger, R. von Tavel, G. Staffelbach, A. J. Welti and J. B. Rusch. 98 pages, 95 illustrations (26 in full color). Lucerne: Verlag J. Nietlispach, 1951.

This book celebrates the 70th birthday of one of the greatest living Swiss mountain painters. Hodel's studio and diorama, directly across from Lucerne's lion, are remembered by many visitors. He is a modernist, though less so than Hodler, his late contemporary. Hodel is a master of animal painting—goats, sheep and cows being among his favorite subjects—but he also brings high-key colors to play upon the lake, the Rigi and the views from heights adjacent to Lucerne. There is nothing harsh or crude in his palette: all his work is a delight to the eye and a pleasure to live with—a good justification for art, and one which is corroborated by this worthy book.

J.M.T.

The Provinces of France, edited by Doré Ogrizek for the "World in Color Series." 508 pages, with many pictorial maps and other illustrations in color, appendices and index. London: McGraw-Hill Publishing Co., Ltd., 1951. Price, $4.20.

Uniform with the earlier volume on Switzerland, this new work merits attention on account of the section (pp. 292-312) by Samivel

on Savoy and Dauphiné—an excellent, if compressed, summary of the history of the Western Alps, of course illustrated by Samivel himself. One of the best illustrations shows Antoine de Ville, military engineer of Charles VIII, and his henchmen ascending Mont Aiguille by royal command in 1492: a tangle of pikes and scaling ladders supports frightened climbers in old court costume, and Samivel's favorite jackdaw careens in flight above.

J. M. T.

Le Ski, by Philippe Gaussot. 64 pages, 64 illustrations. Paris: Editions de Varenne, 1951.

In this unpretentious book one finds much that is interesting about the development and methods of the French school of skiing. The pictures are exciting. One is amused by the costumes of the early lady skiers and by the prehistoric Scandinavian views. There is a useful glossary.

J.M.T.

Lapplanderfahrt im Rentier-Schlitten, by Liselotte Kattwinkel. 216 pages, 37 photographic illustrations by the author and eleven sketches. Braunschweig: Georg Westermann Verlag, 1951. Price, $3.25.

One of the most interesting books about life above the Arctic Circle, this appeared in Finnish and Norwegian editions in 1941 and is now for the first time available in a German translation. The author lived with the Lapps, sharing the hardships in their land of forests, moors and snow-covered lakes. Her book reads like a charming diary, recording the joys and sorrows of the people who wander with their herds of reindeer between northern Sweden and the Kola Peninsula. The illustrations are all that could be desired.

J.M.T.

The Lapps, by Björn Collinder. 252 pages, with frontispiece in color, 25 photographic plates, bibliography and index. New York: Princeton University Press for the American Scandinavian Foundation, 1949. Price, $3.75.

The professor of Finno-Ugric languages in the University of Uppsala has lived among the Lapps and written the most thorough descrip-

tion of them available today. This is almost the first book in English on the subject since Johannes Scheffer's *History of Lapland* was published at Oxford in 1674. Lapland forms the northern crown of the Scandinavian peninsula; and its 30,000 inhabitants occupy parts of Norway, Sweden, Finland and Russia. Through their nomadic culture they have preserved the ways of their forefathers. We find here a multitude of facts concerning their costumes, tents, skis, dogs, herds of reindeer, ceremony of the bear hunt, family life, language, literature and art.

J. M. T.

Nomads of the North. Text by Elly Jannes; pictures by Anna Riwkin-Brick. Translated by William Cameron and Karin Wander. 82 pages of photographic illustrations, each with an explanatory paragraph of text, and an introduction. Stockholm: Kooperativa förbundets bokförlag, 1950. Price, $3.75.

Of the three books on Lapland here reviewed, this documentary volume presents most graphically a life-year in the Lapp district of Jokkmokk. It depicts a pattern in which tense effort alternates with repose among families who still travel by sled, use reindeer as pack-animals, and live in tent-shaped huts; and it follows them in the summer journey through the foothills of Kabla and the Sarek mountains to Lake Virhaune on the Norwegian border, and finally back to the autumn and winter camps. The pictures of the reindeer and the terrain are magnificent.

J. M. T.

La Norvège d'aujourd'hui, edited by Per Vogt. 160 pages, 160 photographic illustrations. Oslo: Editions Dreyer, 1950.

The stern magnificence and varied character of the Norwegian scene are here outlined. Among the subjects treated are ancient monuments, literature and science. The final third of the book is devoted to descriptions of regions: the cities and towns, the valleys of the east, the fjords, the north country to Lofoten and Finnmark. This is Norway at a glance—the best picture book of the country that we have seen.

J.M.T.

VARIOUS NOTES

United States: Climbs in the Pacific Northwest

"Fixed" Routes on Faces. In recent years several climbers in the Pacific Northwest have become interested in long, sheer face climbs —for example, the S. Face of Forbidden Peak, the W. Face of Eldorado and the E. Face of the Mt. Temple massif (Cashmere Crags). The E. Face of Mt. Index, the N. Face of Mt. Baring and the N. Face of Johannesberg are described in notes that follow.

Although regarded with skepticism by some, these faces provide really excellent training in rock climbing. The problems demand highly developed techniques and the best of teamwork, and sometimes they call for modifications of the usual techniques and equipment. Thus, on several of these ascents, so long as to require more than one day of climbing, bivouacs have been eliminated by the establishment, with ropes and hardware, of "fixed" routes. At the end of the day, the party descends rapidly to a comfortable camp. When the climb is to be resumed, the party ascends rapidly to the previous high point. The system is probably usable on most sheer face climbs, but of course it must be adapted according to particular conditions—the length of the climb, the nature of the problems to be encountered, the skill of the climbing party.

It will be seen that the system has both advantages and disadvantages. Briefly, some of the advantages are these: (1) it enables the climbers to keep reasonably fresh, whereas a bivouac usually saps energy; (2) it allows the climbers more time to study problems along the route; and (3) it reduces the chances of prolonged exposure to bad weather. Among the disadvantages, on the other hand, are these: (1) it requires large amounts of equipment; (2) it may involve use of fixed ropes and other equipment left in place for considerable periods and therefore not entirely to be depended upon (small animals can chew fixed ropes, and piton cracks can slowly widen); and (3) it exposes a party to the hazards of the climb at different times and for a longer total period of time. In any case, it may be said that elimination of bivouacs made the adventures on Index and Baring more enjoyable.

P. K. Schoening

Ascent of the E. Face of Mt. Index. Visible from the Stevens Pass Highway (Washington State Highway 15) near the town of Index, the E. Face of the N. Tower of Mt. Index is a seemingly vertical 2300-ft. wall. In 1941 Fred Beckey and Tom Campbell succeeded in gaining almost half the height. In the summer of 1951, with characteristic enthusiasm, Beckey encouraged several of us to renew the assault. Expecting the climb to take more than one day, we planned to spend several days putting a "fixed" route up the face.

On the first day Beckey and I walked about three-quarters of the way from Lake Serene to the N. Tower col and then, in sneakers, established the route, fixing 5/16-in. ropes, to a point near that attained in 1941. The first 300 ft. brought us to the end of an indistinct ledge which led upward to the left. This we negotiated with the aid of several scrub-tree belays and, for additional security, a few pitons. The upper end of this ledge lay at the base of a 40-ft. chimney, which we climbed after placing a Rawl-drive anchor in the extremely hard rock. We could drill a hole only by taking advantage of a small fissure. We broke one drill and came to realize the importance of protection for the eyes against flying particles of rock. Above the chimney four more long leads took us over rock of various degrees of difficulty to the top of a second, longer chimney. Thence we made an almost level traverse to the left (S.) and gained another 100 ft. by a steep, narrow, brush-clogged couloir. This terminated on a rib just to the right of a deep, bowl-shaped couloir on the left middle of the face. Being now close to the high point of 1941, we established a cache and rappelled down.

Dick McGowan and I, the next pair on the face, pushed 400 ft. higher, without extreme difficulty, to an outcrop of rock on the right wall of the bowl-shaped couloir. The route seemed to continue to the head of the couloir, where a large and obvious ledge slanted upward and to the right across the entire face. But the 300 ft. to the ledge proved to be exceedingly tricky: even with the help of pitons, McGowan and I advanced only 150 ft. above the outcrop before the lateness of the hour prompted a series of quick rappels downward.

The final party included two pairs: Dick Burge and Beckey; Jim Henry and me. We started early, mounted the fixed section of the route, and then—taking time and care—climbed the 150 ft. to the ledge. Repeatedly, thanks were offered up for the scrub trees that served as belays along the exposed section of the route. We fol-

NORTH PEAK OF MOUNT INDEX, WITH ROUTE ON EAST FACE
Photo, J. B. Ellis

lowed the large ledge, with ease, to the middle of the face. There it is split by a small but steep couloir that leads to the summit. Luckily, we found an intricate route up the right side of this couloir and soon stood on top.

P.K.S.

Attempts on the N. Face of Mt. Baring. Seen in profile from the Stevens Pass Highway E. of Startup, the N. Face of Mt. Baring looks like an enormous overhang. It rises 3800 ft. above Barclay Lake, the starting point for the climb. Dick Burge and I have tried twice, without success, to climb it.

On the first day we established a route on the lower (and easier) 2500 ft. to a point where two parallel ribs consolidate with the upper face. Our route began on the left (E.) rib and then crossed, by way of an obvious ledge just below the point where the ribs merge, to the right one. A nasty 200-ft. climb on a vertical step in this rib brought us to the face proper. Lack of time forced us to return to Barclay Lake and start making plans for a second attempt.

On another week end we bivouacked 1000 ft. above Barclay Lake and climbed to the upper face early the next morning. The direct and only practical route was the one to choose. We climbed for several hours, using pitons for safety almost all the time. At last we reached a ledge 300 ft. below the summit and 150 ft. from a second ledge that leads up to it. Here, blocked by an almost vertical headwall, we could make out three possible routes: (1) a level traverse to the right, which might enable a party to circle the peak and gain the easier W. side; (2) a semi-broken chimney rising from the right end of the ledge, which might enable a party, with the aid of pitons and probably rock anchors, to attain the ledge 150 ft. above; (3) a direct, frontal route up to the higher ledge. We chose the last. There ensued a vertical 40-ft. climb and a 50-ft. traverse to get around an overhang. Both required direct aid. In the next 20 ft. equipment, strength and—almost—desire became insufficient to support further advance. We had gained about 60 ft. of the necessary 150. The fixed rope was removed on the descent.

In all, more than 30 pitons were used, several for direct aid but most for safety. An effort to place a rock-anchor bolt at the highest point failed when the drill broke owing to the extreme hardness of the rock.

P.K.S.

NORTH FACE OF MOUNT BARING

Photo, L. Oliva

A Fine Conditioning Climb. "Park your car, walk a mile, and enjoy 5000 ft. of arduous, constantly exposed climbing"—such is the invitation offered by the N. Face of Mt. Johannesberg. I have accepted the invitation twice, and spent 32 and 31 hours reaching the summit. Such a climb affords ideal training in the demands of long ascents, the more so if it combines, as this one does, problems of rock and ice. Winter avalanches have kept much of the face swept clean, so that in midsummer there is little danger from above. The peak is only 8200 ft. high and, being located in the Cascade Pass area, is convenient to Seattle.*

In 1949 Gene Schoder and I planned to ascend the N. Face by its middle rib and then traverse the summit ridge. We crossed Cascade Creek half a mile above Gilbert's Cabin and started up the steep, brushy face. The brush gave way to a slabby watercourse leading up to the lower snow fields. Here we encountered some ice and crevasses, easily turned, and began working up the final belt of cliffs. A long trough, easy and difficult slabs, an 80-degree wall (100 ft.) which Gene surmounted with three pitons, and finally some easy scrambling brought us to the lower W. summit of Johannesberg. Now we could see that a ridge-top traverse to the main summit would be too complicated. We dropped down 1500 ft. and bivouacked on the S. slope.

Next day we ascended the main peak by the labyrinthine-ledged S.E. ridge, where the only problem is route-finding. But the grind had just begun, for there was no short route of descent: the Cascade-Jo couloir is too difficult, the S. Face impossible, the N. Face too dangerous. There seem to be only two possibilities. Gene and I descended the *S.E.* ridge, traversed *westward* along the S. side, then crossed the Johannesberg ridge well W. of the mountain, and dropped down through brush to the road. In 1950 Fred Ayres' party went up by the route of the first ascent, but descended the *E.* ridge, traversed *eastward* on the S. side of Cascade Peak and The Tripletts almost to Magic Mountain, crossed the col, and traversed back to Cascade Pass, "having walked on the left side of their feet for seven hours." Since, despite its low height, Johannesberg is indecently

* Johannesberg was first climbed in 1938 by R. W. Clough, W. Cox, C. T. Bressler and T. Meyers, who used the Cascade-Jo couloir and the S. side of the E. ridge.

NORTH FACE OF MOUNT JOHANNESBERG
Arrow points up Cascade-Johannesberg couloir. Left-hand (dotted) line: 1951 route, with bivouac marked by x. Right-hand (broken) line: 1949 route
Photo, J. Schwabland

huge, one should obviously choose the route of descent in advance, out of consideration for one's support party.

The "direct route" on Johannesberg is the N.E. rib of the N. Face. In July 1951 Tom Miller and I set out to determine its feasibility. We left the car at 5.00 A.M., crossed the river and brush slopes to the snow fan issuing from the Cascade-Jo couloir, and soon attained the base of our rib. For several hours we pulled ourselves up the brushy cliffside. Even in the densest thickets I could hear the avalanches pouring off Cascade and Tom's cheery voice praising the outdoor life. Here the climbing was an intensified version of that on the N. peak of Index, on which we had trained the week before. Above the seemingly near-vertical jungle, we clambered up seemingly near-vertical meadowland, slowed by the heat and our heavy packs.

Our meadowland petered out on a sharp arête. Here we roped. Miller led out along the sheer side wall of the arête and up again to its crest. We followed the crest a way, veered several hundred feet to the right over easy slabs, then zigzagged up some strenuous shelves, using seven pitons. Miller used three more in overcoming a rotten trough and a difficult overhanging chimney. This feat brought us into the reddening sunlight, atop the main crest of the N.E. rib. We bivouacked 300 ft. farther up the rib, beside the great snow cap. We had no fire, but were warmed considerably when we saw the threatening sky clear late that evening.

Next morning we followed the narrow, extremely exposed snow ridge up to the upper hanging glacier, belaying continuously with our ice hammers. After skirting wide, snake-like, around various crevasses in the steep snow field, we reached the rock pinnacle of the final summit. Three leads and two pitons later, we were relaxing on top in the glorious noon. We had arranged with our support party to descend by the Ayres route. The descent of the E. ridge, new country for us, involved several false starts and lost time. After the tedious traverse, just at dark, we met our support party and were glad to be guided by a shortcut over to Cascade Pass. The 1949 and Ayres routes of descent are about equally unattractive. About ten hours from the top to Gilbert's Cabin. Next time I think I'll just stay on top.

DAVID HARRAH

A.A.C. CAMP, 1951

Photos, R. C. Houston

United States: Climbs in Other Areas

A New Route on Devils Tower, Wyoming. Since the first ascent of the "long column" by F. Wiessner in 1937, all successful activity on Devils Tower has been concentrated on the adjacent "leaning column," the route pioneered by J. Durrance in 1938. The register indicates that 13 parties have ascended the Durrance route. With thoughts that it was high time to look for a possible new route, a party from the Mountaineering Committee of the Potomac Appalachian Trail Club, of Washington, D.C., met at the Tower in late August 1951. The party of four included Herb Conn, Art Lembeck (A.A.C.), Ray Moore and Tony Soler.

Moore and Soler explored numerous frustrating leads on Aug. 29th and left a rope dangling through karabiners in several pitons and an expansion bolt N. of the Big Ledge (the easy traverse portion of the standard routes) and far below it. By unanimous consent, this 40-ft. start was abandoned in favor of a less impossible crack on the E. face of the Tower, beneath the N. end of the Big Ledge. The crack is about 150 yds. E. and N. (right) of the Wiessner route and out of sight of it. Broken sections at the base of the Tower allowed easy scrambling to the height of the leaning block. The climb was third-class for 30 ft., then fifth-class. A wide crack in the left side column begins working, 55 ft. up, toward the angle-piton crack between the columns. Another 70 ft. up, the left-hand crack becomes the piton crack, and the right-hand crack widens out. This is the situation for 40 ft. A short, bulging overhang was passed by means of a layback. The same technique was used for most of the next 40 ft. In this section pitons had to be inserted while the climber was in a semi-layback position, holding on with one hand. This exhausting procedure resulted in one fall. The leader dropped from 12 to 15 ft. above his upper piton, but was stopped, suffering only slight scratches on his arms, by the dynamic belay of his second. In use at the time were 7/16-in. nylon rope, an old U. S. Army angle piton and an Army surplus aluminum karabiner. Above this point the slope became slightly less, and the two cracks again became useful.

Since layback piton-pounding proved too difficult, Soler drove in six pitons for direct aid, skillfully edging on top of the one he had just placed in order to drive the next one. This maneuver whereby

each piton was used first as a handhold, then as a foothold, without a rope sling, was a beautiful example of balance climbing. The 23rd piton, placed in a horizontal side crack in the left-hand overhanging column, permitted a short traverse and retablissement to its sloping, splintered top—the first belay point on the climb. After the other climbers had "prusiked" up to this platform, three more pitons were used before the party reached the big ledge at the N. end, from which an easy scramble led to the summit. During the 9½-hour climb, 26 pitons (24 of them angle pitons) had been used. The first pitch of what is now officially known as the Soler Route was *belayed through pitons from the bottom* during a 240-ft. lead!

A. C. Lembeck

The Chisos Mountains of Texas. Probably of most interest to the mountaineer in Texas are the Chisos Mountains. The rugged volcanic range rises sharply from the desert floor in a spectacular maze of jagged peaks, deep canyons, spires and volcanic necks. Located within the Big Bend National Park, the primitive region is pierced by one good road.

Most of the major peaks have been ascended by the simpler routes. There are numerous very difficult routes up the various faces of practically every one of them. Of particular interest to the climber are the countless unclimbed spires flanking the mountainsides and, in the southern part of the range, some isolated volcanic necks. The nature and complexity of the volcanic mass makes for a variety of types of rock. Characteristic of the larger peaks are sound rhyolites, jointed and fractured in such a manner as to afford safe climbing on very steep pitches. In contrast, there are peaks of relatively rotten rock, exemplified by the volcanic necks. The loftiest parts of the range rise some 4800 ft. above the desert floor, with the maximum elevation 7835 ft. above sea level.

It is well to be aware of the scarcity of water in this region, and also of the effects of sudden torrential downpours upon unpaved roads and in canyons.

A. E. Owen

United States: Activities of the Clubs

A.A.C.: Wind River Camp, 1951. California members of the A.A.C. have long wanted to become acquainted with members from

other parts of the country. This desire has been shared, one feels sure, by members elsewhere. One often hears that the best mountaineering team is composed of climbers who have made many ascents together. If our members occasionally had opportunities to climb together, certainly the Club as a whole would enjoy greater understanding and unity of purpose. At one of the meetings of the Sierra Nevada Section, it was decided to move toward this goal by offering to organize a summer camp for the entire Club. For geographical reasons, we wanted an easily accessible, centrally located mountain area in the United States, where climbers and their families could pursue their various favorite out-of-door activities. By keeping the organization in the hands of our local group, we would be able to act more effectively.

The suggested site at Island Lake in the Wind River Range of Wyoming proved to be admirably suited to our purpose. Camp was reached in a day's moderate hike from the end of the road at Elk Heart Park. Threatening clouds discharged their burden before our pack train arrived at the lake. We were able to set up camp and have our first meal without rain. We were most fortunate in having as cooks Alma and Harry Hertenstein, of the California Alpine Club. Their experience of perhaps 25 years in this sort of camp catering enabled them to turn out an unsurpassed menu with a minimum of equipment. They well deserved the unanimous comment, repeated over and over again: "This is the best camp grub I have ever tasted!" During the two-week period (7-17 August 1951), the various chores were equally distributed among the 31 participants, in rotation. The menial tasks were handled with cheerful willingness and dispatch that seemed surely to be direct results of mountaineering backgrounds. The Hertensteins declared that this was the best group of helpers they had ever camped with.

During our stay Fremont Peak was climbed by 19 of the party. Mt. Lester, close to the camp, was equally popular. Two parties traversed all three summits of Lester from W. to E., including the much lower middle summit, which (as the heavily scarred summit rocks show) is the lightning rod of the area. Seventeen visited Bradley Gilman's summit monument on Cairn Peak, with Brad himself leading one party up through the tight easternmost chimney on the S. side. Seven climbed Mt. Jackson (formerly Glacier Crest),

and six did F-3. A bivouac camp established near the shore at the upper end of the higher Titcomb Lake served as base for climbs on Mts. Woodrow Wilson, Helen and Sacajawea.

All in all, these were two very enjoyable weeks. Remarkably clear weather was varied by some excitement in the form of threatening thunderstorms, hail, rain and a two-inch snowstorm which knocked down the storage tent. But everyone happily achieved the purpose of the outing. A full moon rising over Mt. Lester added cheer to the stories and songs around the evening fire. It is to be hoped that similar camps will be held from time to time in the future, with various sections or groups within the A.A.C. taking turns as host.

Oscar A. Cook

Some of us went to the Wind River Camp with misgivings, thinking that such a large group effort might curtail the informal joys of a smaller outing in the mountains. All came away delighted with this larger outing for its very informality and unrestricted opportunities for climbing, as well as its ample chances for the non-climbers to fish, botanize and explore. The self-sacrificing California committee, ably headed by Oscar Cook, deserve great credit for their most effective yet unobtrusive organization, which provided everything in the way of comfort and pleasure.

W. S. Child

A.A.C.: Sierra Nevada Section. New officers were elected at the final meeting in December 1951: Oscar A. Cook, chairman; Robin Hansen, vice-chairman; Richard C. Houston, secretary-treasurer; Lawrence G. Coveney and David R. Brower, additional members of the executive committee.

The Section followed through on its proposal to act as host at a summer outing for the Club. The committee responsible for planning and operating the camp was composed of Oscar A. Cook, camp manager; Richard C. Houston, assistant manager; Will Siri, Philip C. Bettler, David R. Brower and Richard M. Leonard. Prime values were the foundation of new personal friendships cementing our national ties, and the indoctrination of youngsters in mountain lore and safe climbing practices.

Continued interest in the semi-formal quarterly meetings, with speakers, has established this program as a permanent feature of the Section's activities.

Several ascents by members of the Sierra Nevada Section are worthy of mention. William Dunmire, Allen Steck and James Wilson took part in the ski ascent of Mt. Tyndall. Alfred Baxter was a member of the party that climbed Mt. Bear and then, by a new route, Mt. Bona. Dunmire and a companion climbed the Phantom Pinnacle of Yosemite. John Salathe and a companion climbed the S. face of Sugar Loaf Dome in Little Yosemite. The ascent involved the usual class-six inconveniences: bivouacs, expansion bolts and slings.

OSCAR A. COOK

A.A.C.: Cascade Section. William Eastman was elected chairman at one of the several meetings held in Seattle in 1951. Kurt Beam, with Erling Strom, made an ascent of Mt. Assiniboine. Among those climbing in the Alps were Edward LaChapelle, George Senner and William Byrd. Reports from the Mt. Rainier Guide Service indicate a very successful summer, with over 300 climbers reaching the summit, 82 of them led by guides. Among the new ascents by members during 1951 was that of Mt. Saugstad, near Bella Coola, by Peter Schoening and his party.

DEE MOLENAAR

Sierra Club. Early in February 1951 the activities of the climbing-and-skiing contingent in the Sierra Club took on the shape of a trans-Sierra ski tour. Two parties, one starting from the E. at Whitney Portal and the other from the W. in Giant Forest, planned to meet in the center of the range and then exchange cars at the finish. After a two-day, 4000-ft. struggle in reaching the 13,300-ft. pass N. of Mt. Whitney, the E.-W. party turned back, one of its members having suffered a wrenched knee. The W.-E. group (William Dunmire, James Wilson, Allen Steck and Norman Goldstein) successfully completed the traverse after eleven days of semi-skiing—rocks, logs, sometimes even snow. The party climbed Mt. Tyndall (14,025 ft.), making possibly the first ski ascent.

Members in the southern part of the state have been pioneering in the Piute Crags of the Sierra Nevada. The major crags rise 300-400 ft. above the notches terminating the couloirs, and the highest stands at about 12,300 ft. Ray Van Aken, Ray Osoling and George Harr made the first ascent of Crag No. 2 after surmounting several fourth-class pitches. Charles and Ellen Wilts and George Harr found that Crag No. 4 required pitons for the ascent. Harr and Wilts found Crag No. 1 equally demanding.

Other climbs, already mentioned in this *Journal,* included those on Mts. Bear and Bona, by a group from the San Francisco Bay area, and those on Phantom Pinnacle and Sugar Loaf Dome.

Will Siri is continuing his experimental measurement of belays (standing, sitting, variations) and rappel loads. Apparently the best belaying positions fail under tension of 300-400 lbs.—only twice a man's weight. The secret of success in stopping a fall lies, of course, in use of the dynamic belay, and particularly in allowing the rope to run over a rock ledge or through a karabiner, either of which can absorb the greater part of the shock load. Also, it is now known that the belayer's coefficient of friction is about 0.5. This means that he can hold 150 lbs. by applying only 15 lbs. to the free end of the rope around his waist. Load failures for sitting and standing shoulder belays appeared to be roughly the same. In the latter, however, the belayer lost complete control of the rope and himself. The sitting belayer, after failure, was able still to exert some force on the rope. The European standing shoulder belay has been shown, quite convincingly, to be inadequate.

It seems worth while to mention that on the 1947 trip in the Coast Range Robin Hansen, Richard Houston and Oscar Cook worked out almost exactly the same dynamic snow belay described by Fred Beckey in the *A.A.J.* for 1951. Sierra Club parties have continued to employ it since then.

ALLEN STECK AND OSCAR A. COOK

Mountaineers. In 1951 the annual outing of the Mountaineers, of Seattle, was held in the Olympics. The climbing group went to the Selkirks.

DEE MOLENAAR

University of Washington Mountaineering Club. Membership in this new club is now 35 and still growing. In the spring the Club sponsors two trips a month. Unscheduled trips took members to the Cashmere Crags, where several first ascents and new routes were made, the Pickett Range and the Candle, E. of the main peak of Mt. Temple (first ascent).

R. Berge

Mazamas. In 1951 the Mazamas, of Portland, held their annual outing from July 22nd to August 5th at Horseshoe Lake in the Wallowa Mountains of northeastern Oregon. This wilderness area had been the site of three previous Mazama outings (1918, 1931 and 1941). During April and May the climbing committee conducted a training course with clubroom lectures and demonstrations, supplemented at the end by field trips for practice climbs on rock and snow.

The regular climbing program in 1951 was favored by unusually good weather. On 27 official Club climbs, 19 different peaks were ascended. Two "climbers' outings" of one week each were held in the northern Washington Cascades. The first, from July 21st to 29th, resulted in ascents of Glacier Peak by the N. ridge and of Mt. Baker by the Boulder Glacier ridge. The second, from August 11th to 19th, was in the Monte Cristo district. Successful ascents were made on Silver Tip, Cadet, Del Campo and Sloan Peaks.

On Labor Day week end the 20th annual convention of the Federation of Western Outdoor Clubs was held in Mazama Lodge, on the lower slopes of Mt. Hood. This was an anniversary—a birthday homecoming. The Federation had been founded in Mazama Lodge 20 years before, owing very largely to the efforts of Mr. L. A. Nelson, twice president of the Mazamas and for many years manager of the West Coast Lumbermen's Association. Having consisted originally of 18 clubs, the Federation now includes more than 30 of the leading outdoor organizations of the western United States.

Fred D. Ayres

Colorado Mountain Club. The Club's annual outing for 1951 was held in the Tetons, with 60 in attendance. The Exum route on the Grand was the most popular—26 ascents. Five members of the Club participated in the successful expedition which made a new

route on Mt. McKinley. Henry Buchtel initiated this expedition.

In the late spring the Denver group held two technical schools, and the Boulder group a rock climbing school. A total of 450 took advantage of this training. The Club's new guidebook to the Colorado Rockies, edited by Robert Ormes, has been completed and is scheduled for release in the spring of 1952. The Club is now located at 1400 Josephine St., Denver.

ANNE B. KENNON

Kachina Mountain Club. The Club, with headquarters in Phoenix, Arizona, has an active membership of 20 and is admitting new members as soon as they can be trained. All new members must make at least six practice climbs before they are accepted. The Kachinas try to emphasize safety and, considering the number and difficulty of their climbs, have had a good record. There have been three minor accidents during the past year, two from falling rocks.

In that time the Kachinas have made about 90 rock climbs. Apart from practice climbs near Phoenix, they have made several first ascents and new routes in the desert ranges of central Arizona. In July 1951 six members went to the Tetons to gain experience on snow and ice. They climbed the Grand by the Exum route, in a blizzard. A few returned in August and made what is believed to be a new route on Cloudveil Dome. Currently, the Kachinas are planning an expedition to a 1000-ft. desert pinnacle that has twice turned climbers back.

GARY DRIGGS

Iowa Mountaineers. In 1951 membership increased to 1365. Mountaineering classes were continued, and the Club's system for rating qualifications was revised. Qualifications are now similar to those of the Colorado Mountain Club. The safety record was maintained, despite the fact that a larger number of less experienced climbers were given the responsibility for leading parties and training novices. The results greatly outweighed the calculated risk. "Babying" does not seem to produce skilled or necessarily safe climbers. The problem seems to be that of selecting members who have sound basic training, good judgment and the ability to control seemingly limitless physical energy and daring.

The 1951 summer outing was held in Mt. McKinley Park. John Ebert led a party of 18. Seven days of almost continuous snow defeated two serious attempts to reach the higher of the Silver Twins (8806 ft.), but the party was able to explore the head of Sunset Glacier and climb two 6200-ft. peaks (apparently first ascents). Members in smaller parties climbed in the Colorado Rockies, Tetons, Wind Rivers and Canadian Rockies.

It is interesting to note that many members who never saw mountains before participating in Club outings now enjoy the mountains every summer with their families. In the hope that these and others will come to the Club's summer camps whenever they can, we have announced plans for several years in advance. In August 1952 a twelve-day base camp will be established in the N. Palisades region of the High Sierras of California; in August 1953 a seven-day base camp will be maintained at Mt. Assiniboine in Canada and then, immediately afterwards, a seven-day camp at Mt. Robson. In 1954 the Club will either go abroad or return to Alaska. An outing to Mexico has been scheduled for the Christmas holidays of 1952.

S. John Ebert

Chicago Mountaineering Club. The highlight in a busy year was the Club's outing in Rocky Mountain National Park, Colorado, 5-17 August 1951. With 62 members and guests, this was the largest outing in the Club's history. Base camp was established in a private area adjacent to the Glacier Basin Campground; and a high camp, with facilities for ten climbers, was placed at Black Lake in Glacier Gorge. This beautifully situated lake affords probably the finest campsite in the Park. Magnificent weather prevailed. All peaks in the arc between Longs Peak and the Little Matterhorn, with one minor exception, were climbed. Certain routes on the Little Matterhorn and Arrowhead may have been new. Two parties climbed the E. face of Longs Peak by Alexander's Chimney.

John F. Fralick

Potomac Appalachian Trail Club. The mountaineering committee has held weekly local climbs, emphasizing instruction in the principles of safety. Members climbed far afield in 1951—Tetons,

British Columbia, eastern Wyoming. In August a party of four made a new route on Devils Tower.

PAUL BRADT

Harvard Mountaineering Club. The Club's summer activities in 1951 were centered in the leaders' climbing school, held in the Hermit Range of the southern Selkirks. In addition, an H.M.C. expedition made three first ascents in the Windy Range of the northern Selkirks, including that of Dolphin Peak. Another party attempted to reach the Clemenceau Ice Field from Kinbasket Lake by way of the Middle River. Members participated also in the Hendricks expedition in the Canadian Rockies. Others climbed in the Canadian Rockies, the Cascades, the Tetons and the Alps.

In the fall a successful rock-climbing season evoked more active interest from new members than ever before. Frequent ice-climbing trips to Mt. Washington will provide instruction for new members and leaders alike in the fundamentals of snow craft. Emphasis will be placed on judgment. Under the safety committee, last year's course in first aid and mountain rescue will be continued, with discussion of the A.A.C.'s Safety Reports in monthly meetings. The safety committee has been given a more active part in the judging of leaders qualified for local climbs and summer expeditions.

THAYER SCUDDER

Yale Mountaineering Club. In 1951 the Club continued its program of training in rock-climbing and ice-climbing techniques, supplemented by a course in first aid and mountain rescue. There were numerous week-end trips to the Shawangunks and New England cliffs. Winter activities included lectures and movies. In March a large group spent a week ice-climbing on Mt. Washington. Although the Club sponsored no summer expedition, members climbed in many ranges, including the Cascades, the Colorado Rockies and the Tetons. Two members journeyed to the Alps to follow the well-worn routes of Switzerland and Savoy.

MICHAEL CURTIS

Princeton Mountaineering Club. The spring of 1951 found the Club preparing its first bulletin, climbing in the Shawangunks and

looking forward to an active summer. During the summer members made first ascents in the Yukon and a number of climbing tours in N. America (Bugaboos, Tetons, Rockies) and in Europe (Dolomites, Austrian Alps, Swiss Alps). The initial turnout in September produced finally a group of about 30 active members. Again the primary functions of the Club are training new members, developing competent leaders and stressing the importance of safety. The current program includes belaying practice in near-by climbing areas and at the Delaware Water Gap, a series of lectures and a winter trip for ice climbs in Huntington Ravine on Mt. Washington.

JOSEPH E. MURPHY, JR.

Dartmouth Mountaineering Club. In 1951, both in the spring and in the fall, the Club held its six-week course in rock climbing. This course, now traditional, is accepted by the college in fulfillment of the physical education requirement. A new issue of the D.M.C. *Journal,* the first since the original issue in 1938, is being planned. Members climbed in the Crestones, in Rocky Mountain National Park, in the Bugaboos and in the Tetons. There were climbs closer to home on Katahdin, Huntington Pinnacle (Mt. Washington), and several new and promising cliffs up the Connecticut Valley. An interesting winter ascent of Mt. Washington was made, partly in preparation for the ascent of Mt. McKinley, in which two members of the D.M.C. participated.

RODGER EWY

Haverford Mountaineers. The Club now has 18 members, with Archibald MacIntosh as faculty advisor. Activities center in training on near-by cliffs. Plans for the future include a possible trip to the Canadian Rockies in 1952.

PETER WOOD

ALASKA AND THE YUKON

Mt. McKinley: A Proposed New Route. In a somewhat unusual article published in the 1947 *A.A.J.,* I discussed two possible

MOUNT McKINLEY
Proposed route up West Buttress of North Peak
Photo, B. Washburn

North Peak
9,440
South Peak
10,000
13200
Peters Icefall
Cook, 1903
PETERS DOME
7700
to Peters Pass

new routes up Mt. McKinley.[1] Since then, I have flown around the mountain on numerous occasions; and in 1951 I had the good fortune to participate in the first ascent of McKinley by one of the routes I had described. My purpose in this note is to comment on the present condition of the still unclimbed route up the N. face of the N. Peak and to suggest serious consideration of still another route via the western ridge of the N. Peak.

During the last five years, the condition of Peters Glacier[2] has greatly deteriorated. Not only is the surface no longer the beautiful, smooth promenade that it was in 1903,[3] but it is markedly different even from what it was six or seven years ago. The ice around and below the Tluna Icefall has roughened and shrunk away from the valley walls; and, although not at all impossible, it presents much more disagreeable walking than it did a few years ago. Since 1945, when the pictures illustrating the article in the 1947 *A.A.J.* were taken, even the surface of Jeffery Glacier has broken up surprisingly.

On 2 June 1951 Terris Moore and I landed in his Super Cub (equipped with ski-wheels) on the level surface of the upper Peters Basin, exactly where a landing had been proposed.[4] The landing was about as late in the year as would be safe, except after a heavy winter, as crevasses were already beginning to open. It can now be said definitely, however, that safe landings can be made here and that the altitude is about 7700 ft.

Also, using a pack train from Wonder Lake to a point just below the main bend of Straightaway Glacier, the four-man Denver contingent of our 1951 expedition crossed Peters Pass (8200 ft.) on foot, in order to attain Kahiltna Pass, where our main base camp was located (10,000 ft.).[5] It took three days by pack train to reach the limit of horse travel (5300 ft.) just below the Crosson corner. From here it was a four-mile climb to Peters Pass over a dying glacier,

---

[1] Bradford Washburn, "Mt. McKinley from the North and West," *A.A.J.*, VI (1947), 283-93.

[2] Originally named thus by Brooks in 1902; changed to "Hanna Glacier" by Wickersham in 1903. Recently the original name was officially confirmed.

[3] See Robert Dunn, *The Shameless Diary of an Explorer* (New York, 1907).

[4] Washburn, *op. cit.*, p. 291. Note that official permission for all airplane landings in McKinley Park is required by the National Park Service.

[5] This practical approach to Peters Basin was discovered during our helicopter flights of 1949.

gutted with crevasses and two minor icefalls, and covered with treacherous June slush.

Peters Basin has now been reached three times in three different ways: on foot, by climbing the whole length of Peters Glacier (Cook, 1903); on foot, with the aid of a pack train, via Peters Pass (Ambler, Bishop, Griffiths and More, 1951); and by airplane (Moore and Washburn, 1951). The last two methods proved so much more practical than the first that it is important to record them.

Peters Basin is a wonderful spot from which to start a splendid new route up the N. Peak of McKinley—a route fully as interesting and difficult as the Wickersham Wall route described in my *A.A.J.* article in 1947. Space is not available for a detailed description of this route. It is basically Dr. Cook's route of 1903,[6] except that it does not lead to the S. Peak as Cook erroneously thought. The proposed route is as follows:

Above an excellent base campsite in Peters Basin, attain the 11,000-ft. shoulder where Cook had his last camp. This can probably be done best via the snow slopes on the left (N.) side of the bottom of this buttress, except under conditions of deep fresh snow or slush.

From this 11,000-ft. camp to the next proposed campsite at 13,500 ft. is one of the two most difficult parts of the climb. At first a gentle snow slope, the ridge rapidly gets steeper; and around 12,000 ft. the first rock ledges (black schist) are passed. A steep cliff of rock (about 12,700 ft.) rises dead ahead, and the snow should probably be followed all the way to its base. At or near its base, traverse to the right (S.), attaining the rock ridge that dominates the tremendous gulf at the head of the S. fork of Peters Glacier. This rock should provide reasonably good going to the base of another and much larger pyramidal peak (13,500 ft.).

Steep ledges of rock and snow gullies will be encountered in a direct climb of this peak. If they prove impracticable, a steep traverse to the left (E.) leads to a very steep snow slope by which the crest of the ridge can again be reached just behind the tip of Point 13,500. Here a bit of level snow ridge, with prodigious views in all directions, will provide a safe but exposed campsite. Liberal use of ¼-in. fixed ropes in this part of the climb can render all going safe and secure after a reconnaissance.

[6] For an excellent account, see Dunn, *op. cit.*, especially pp. 181-233.

Above here the grade is at first much less precipitous. The ridge now consists of ledges of alternating schist and granite, with large drifts and patches of snow that should facilitate climbing except after recent blizzards. At about 14,000 ft. there is a short steep pitch, and near 15,000 ft. the crest peters out in a beetling rock crag. A traverse to the right here would probably lead into much better going up a snow gully that leads to the ridge ahead—provided that the first steep traverse under the cliffs could be effected safely. If not, the steep going appears to be relatively brief (about 600 vertical ft.). Most of the bad spots should be solved by short traverses to either left or right if a direct attack did not work.

This spot and the approach to Point 13,500 will certainly prove the most difficult parts of the whole climb. Again, the judicious use of fixed rope on the reconnaissance will make future relays much safer and speedier. Above these ledges, several massive granite crags rise right ahead at the bend of the ridge. By cutting to the right of them (if they do not yield easily), the crest of the ridge overlooking the magnificent upper basin of Peters Glacier is attained at about 15,600 ft.

Here is a perfect campsite, above which no more major difficulties at all remain. The going is downright easy along the top of the ridge, which now swings in a gentle arc to the top of Point 16,600. The grade is gentle; and the crest is broad and rounded, consisting of granite boulders and ledges interspersed with hard-packed drifts.

At the top of Point 16,600 (more of a dome than a point), there is virtually level going for several hundred yards, leading to the foot of the last steep pitch guarding the approaches to the Great Plateau of the N. Peak. Although the entire ascent to the top of the N. Peak can probably be effected in a single day from the 15,600-ft. camp, an advance camp at the foot of this slope would be highly advisable. Trail markers are of vital importance over every inch of the route from here on.

The snow dome now visible ahead, underlain by ledges of ink-black schist, is almost exactly 18,000 ft. high. Bear to the left at first, avoiding the steep rocks; then swing back to the right as the slope becomes steeper. At about 17,300 ft., as the schist ledges are turned to the left (N.), there is some steep snow; but the surface at this altitude is usually well-packed on pitches like this, exposed to the

prevailing W. winds. This slope should be reconnoitered in the afternoon, as it will be very cold climbing in the early morning shadows.

At 18,000 ft. the grade rapidly lessens, and the summit of Point 18,700 appears ahead. It can be climbed relatively easily by following the left (N.W.) skyline, composed of ledges of black schist and patches of steep snow. Thence the final ridge can be followed (1 mi.) to the summit of the N. Peak (19,440 ft.) with no difficulty. If one did not wish to climb over Point 18,700, it would be simple to detour it to the right (S.) via the Great Plateau, which averages about 18,500 ft. in elevation. The N. Peak's summit cone can then be climbed either directly from the W. (as above) or via its S. side by a relatively easy scramble up ledges of black schist and patches of hard-packed snow.

The distance from the 15,600-ft. campsite to the top is slightly more than three miles—all over extremely exposed terrain, as McKinley's bad weather most frequently comes from the W. and S.W. This new route offers a splendid challenge to any group of experienced climbers eager to pioneer an attack on a side of McKinley long believed to be impossible.

BRADFORD WASHBURN

Eastern Alaska Range. The Alaska Range E. of the Richardson Highway was explored during the summer of 1950 by Austin Post and Gottfried Ehrenburg, of Spokane, Don MacAskill (Sierra Club) and the writer. Base camp was set up at the end of the Castner Glacier, near the Richardson Highway where it crosses the Alaska Range by a low pass. Up the Castner Glacier, the beautiful snow dome of the White Princess and the rock summit of Black Cap towered a mile and a half above us; in the direction of the Canwell Glacier rose Mt. Min, with a striking knife-edged ridge.[1]

A preliminary reconnaissance by Post indicated that the Eel Glacier, between the Castner and Canwell Glaciers, should afford a relatively easy route to the heart of the range. Two days of back-breaking work established us in Camp 1, about halfway up the Eel and opposite a group of hanging glaciers from which great quantities

[1] Most of the names used in this article are our own, as no satisfactory map of the region was available. A map covering about 100 sq. mi. was made by Austin Post during the expedition.

of ice fell, with a roar, from time to time. Unfortunately, our beautiful weather began to turn into snow and rain. From Camp 1 we made ascents of Triangle and Wind Peaks, which are secondary peaks along the ridge between the Castner and Eel Glaciers. Even though the major summits only occasionally emerged from the clouds, Triangle was an excellent point from which to look at the dozens of mountains around us.

Several miles farther up the Eel, we established a cache in the hope that we might eventually attempt Snowhite. The part of the glacier around Camp 1 was either smooth or broken by open crevasses. Here the surface was very treacherous, with lightly bridged crevasses that made it important to travel only when roped. Moreover, the weather grew even worse. After a thorough soaking, we decided to retreat and enjoy for a few days the relative luxury of the Rapids Roadhouse, about ten miles from base camp.

When good weather returned, we again started relaying supplies up the Castner Glacier. The first few miles were very exasperating: the glacier is covered with brush and a thin, spongy layer of morainic material. Farther up, the ice was bare and separated into longitudinal bands by the medial moraines. Near the point where the three main branches of the Castner Glacier come together, we set up a camp on a remnant of a large lateral moraine overlooking the beautiful streams of ice. Being still two or three miles from the base of the White Princess, our objective, we moved part of our equipment and supplies to that point.

On August 7th we were up at 3.30 A.M. The sky was cloudless. Everything appeared favorable for the climb. From a distance, the S.W. ridge of the White Princess looks like a suitable route; but closer inspection shows that it is broken by a giant pinnacle. Seeing this, we crossed the small glacier in the basin between the S.W. and S.E. ridges and started up the latter. The going was quite easy, and we made good time. After a second breakfast, we climbed the face of the mountain, just off the summit of the ridge. The rocks were covered with about a foot of snow, and there was a little danger of starting an avalanche. One large avalanche did start near us, but on the opposite and steeper side of the ridge. We lunched at the highest outcrop of rock near the junction of the S.E. and S.W. ridges, with the summit still well over 1000 ft. above us. Then we donned our

crampons, roped, and started up the spectacular corniced ridge. Since the cornice hung many feet out, over a drop of several thousand feet, we had to keep off the crest of the ridge and climb on the snow face of the mountain. The snow was in perfect condition. We reached the summit at 2.15 P.M. Our altimeter read 9760 ft. Corrected, the altitude would probably be about 10,000 ft. To our surprise, we seemed to be on the highest mountain in the region E. of the Delta River. Even the rugged peaks to the S.E. appeared to be below us, despite the evidence of the (incomplete) maps available to us. We spent an hour on the summit and then had a quite uneventful descent —even though we had to move with greater caution over the now softened snow on the rocks of the lower reaches.

The White Princess was our main climb, but we did considerable scouting before we left the area. We spent some time exploring the Slide Glacier, with its icefalls and giant séracs; and two of us climbed a secondary peak called Ideal, for the sake of the view. Post used a number of secondary peaks as triangulation stations. Our conclusion was that the eastern Alaska Range, though not comparable with the great mountain areas of Alaska, has much to offer the climber—dozens of peaks S.E. of the White Princess that are rugged, unexplored and, at the same time, very accessible. A determined party could reach these peaks by any of several routes. The region is extremely interesting also from the geologist's point of view. We are still at a loss to explain some of the phenomena we observed on the Castner Glacier. The beautifully banded and folded rocks—found everywhere—were endlessly fascinating.

LAWRENCE E. NIELSEN

*Mt. Logan: Third Ascent.** On 17 May 1950 Gordon Herried, Mark Christensen, Harvey Turner and I headed for Chitina with 850 lbs. of food and equipment. We had been planning an ascent of Mt. Logan all the previous winter and took food to last at least six weeks, with a margin for another week if necessary.

At Chitina we talked with Herb Haley, the pilot who was to do the flying for us, and heard for the first time that Mr. Norman Read's party was already there, having been flown to the upper Ogilvie

* Cf. "Mt. Logan: Second and Third Ascents," *A.A.J.*, VIII (1951), 191-2.—*Ed.*

Glacier. Mr. Haley told us also that the strip at the end of the Chitina Glacier was too badly gullied for a landing, and that he could take us no closer than the strip at Canyon Creek, about 25 miles down the Chitina River. Christensen and Herried were flown to the Canyon Creek strip and walked from there to the strip at the base of the Chitina Glacier. They took three days to fill and level the strip enough for a landing, and on the fourth day Turner and I were flown in with the rest of our gear. Haley had been able to see a considerable distance up the glacier, and he told us that the nearest clear ice was about 25 miles up the Logan Glacier.

It took five days of travel over the terrible footing characteristic of moraine to reach ice clear of rock débris. In a day and a half of extra hard pressing, we were back at the end of the Chitina Glacier, ready to take the second load up to the first. After another five days of hard going, we were once again on clear ice and able to use our one toboggan. Another had had to be abandoned with a lot of other gear we reckoned we could do without.

For the next several days we proceeded up the Logan Glacier, carrying about 70 lbs. and pulling about 300 lbs. on the toboggan. We established a cache at the point where the Ogilvie Glacier meets the Logan, and then started up the Ogilvie. As we gained altitude, we ran into deep, mushy snow that made pulling the toboggan very hard. Abandoning it, we took all the rest of the gear on our backs. About halfway up the Ogilvie Glacier, Turner's leg began to hurt, and he decided that it would be best for the party if he turned back. He ate a last lunch with us and then left. It was sad to see him go.

The day after Turner left, we saw Read's base camp. We dropped our packs about a quarter of a mile away and hurried up to see Severt Jacobson, Read's packer. We ate a big dinner with him and then started back to fetch our packs. While we were returning with them, Herried suddenly dropped out of sight. As soon as I was sure that Christensen had a good belay, I crawled to the edge of the crevasse and peered in. Herried was down about 30 ft.; he was sitting on a ledge, unhurt. As Jacobson was near by, he came down and gave us a hand getting Herried out. It would have been harder if we had been alone, but we could have done it.

Two days later, when we were about ready to continue our climb, we met Read and Roch as they came off the mountain. We

talked a while, and Read offered us the use of anything they had left on the mountain. All we found was one box of prunes. At the base camp (7800 ft.), we left another cache for the trip out. Read left some chocolate and oatmeal, a little of which we used on the way out.

We left the base camp and started up Quartz Ridge at 9.00 P.M. At about 6.00 A.M. we passed one of Read's igloos on the King Glacier, and at 2.00 P.M. we came to Read's second campsite, in King Col. The next day we took to work over our gear and prepare for the rest of the climb. Several hours after our resumption of the climb, we were forced to hole up, at about 15,500 ft., in a blizzard. On the following day, which was clear, we proceeded up and over the 18,-500-ft. pass—a climb that took about twelve hours of steady going. As we started down the other side of the pass, a storm came up. The wind was so strong that we thought our silk tent could not stand it, so we spent two hours building an igloo.

The next day took us to our final camp (about 18,500 ft.). So far we had found only a few of Read's trail markers and no tracks. On the day after, June 17th, at 12.15 P.M., we stood on the summit of Mt. Logan. After taking a few pictures, we turned and headed for camp. Eleven days after we left the base camp, we picked up our cache. About five days later, we were back at the base of the Chitina Glacier.

We rested a day and then started down the river on two rafts, Herried alone on one, Christensen and I on the other. We made good progress, floating downstream most of the day. Later, in a bad stretch of rapids, we were separated. Christensen and I rammed a pile of driftwood and, since we could not get the raft loose, took to the shore and started walking. We were quite worried about Herried, because we had all the food in a waterproof duffel bag. Herried had only enough for one or two days. In the meantime, as we learned later, Herried had capsized, lost some of his equipment, and nearly drowned. Very fortunately, he succeeded in reaching shore with our film, which was well sealed.

Christensen and I spent the next five days walking down the river without once seeing any sign of Herried. Eventually, we arrived at Jacobson's main cabin on his trap line, about 30 miles from McCarthy. About two hours after our arrival, the door burst open—and there stood Herried, who had been only a day behind us all the

way down the river. He had found food to last five days in one of Jacobson's caches, but he had been forced to leave our film and other gear in the cache in order to carry enough to eat.

We arrived in Anchorage on July 19th, exactly eight weeks after our departure. Our film is still in the cache, three attempts to retrieve it having been stopped by bad flying weather. It is well sealed, and we hope that when we have time and money to try again it will still be good.

ALSTON PAIGE

BRITISH COLUMBIA AND THE CANADIAN ROCKIES

Mt. Saugstad. Mt. Saugstad (about 11,000 ft.*) is in the Coast Range of British Columbia, some 13 miles S.E. of the small fishing and lumbering town of Bella Coola. The Mundays and Henry Hall visited the area in three different years and carried out a thorough reconnaissance, but were prevented by adverse conditions from making the ascent.[1] In the summer of 1951, with better luck, John Dudra, of Vancouver, and I were able to reach the summit.

The approach to the peak from Bella Coola consists of a ten-mile ride up the Bella Coola River road to Snootli Creek and then a ten-mile fight through brush S. to Snootli Creek Pass (4500 ft.). Saugstad is two miles S. of this pass, across the headwaters of Noch Creek, which drains W. We took a day and a half to reach the pass—struggling with the brush, feeling grateful to the grizzly bears whose fresh paths sometimes aided us, wondering at the same time what to do if we met one face to face—and then a half-day to trudge the two miles across the headwaters of the creek to a high camp (7300 ft.) on the N.W. ridge.

Early the next morning we began the climb, keeping to the ridge. It was reasonably easy. From about 9000 ft. to the summit, there was glare ice on the rock; but it was not thick enough to cause much

* This altitude has been reported by Mr. Hall to be about 9625 ft.—*Ed.*

[1] See W. A. Don Munday, "Bella Coola Mountain," *C.A.J.*, XXV (1937), 41-9; "Among the Bella Coola Mountains," *C.A.J.*, XXVI (1938), 39-48; "Mt. Saugstad," *C.A.J.*, XXVII (1939), 16-19.

trouble.[2] The weather was perfect. In a little over four hours we were on the summit. Needless to say, fine peaks could be seen all around, especially to the S. Peaks just a few miles to the S. appeared very interesting and perhaps approachable by a trail that is rumored to lead up the Nootsatsum River, a tributary of the Bella Coola. One shaft-like peak W. of S. Bentinck Arm also kept catching my eye. It is not very high, but it might yield some good climbing.

Our confidence inflated by early success on the main objective, we decided to go on to the N. peak of Saugstad, located half a mile from the true summit, along the N. ridge. The obvious route lay along the saddle that led from our perch to the N. peak. But the hour was late, and we retreated to high camp. On the following day we travelled across the two glaciers on the N.W. side of the mountain and attained the N. ridge on the N. side of the N. peak. Keeping to the ridge, but moving out on either face whenever we had to, we slowly gained altitude. There began to be some doubt about the venture: spectacular exposure, quite touchy climbing, threatening weather, shortness of time, smallness of party. At 4.00 P.M., however, we reached the top and hastily constructed a cairn. Then we hastily descended. The glacier was reached at dark.

We spent the next two days in luxury, admiring the peaks from the lower altitudes, consuming quantities of food and returning to civilization. We ate like horses on a balanced diet of two lbs. of food per man per day, with almost 70% (by weight) edible without cooking. During the struggle to the Bella Coola, the brush of Snootli Creek seemed as dense as ever.

P. K. SCHOENING

An Attempt on Mt. Robson. In July 1951 John Oberlin, A. E. Creswell and Fred Ayres attempted the Schauffelberger arête on Mt. Robson, but turned back at about 11,200 ft. because of dangerous snow conditions. Our high point was 1300 ft. below that reached in 1913 by the Schauffelberger party, the first to try Robson by this route. The latter party was forced to retreat by a snowstorm after attaining an elevation only 400 ft. below the top.

On July 22nd, starting from Berg Lake, we established a high

[2] On this ice Dudra's Tricounis held up better than my Bramanis. Considering the trip as a whole (brush, rock, snow), I should say that the Tricounis had a slight advantage, not significantly great.

MOUNT ROBSON

Top: Southwest side, with *a*, *b* and *d* marking nights spent and *c* marking highest point

Bottom: Ice towers from 11,000 feet. Summit more than half a mile away, up the 40-degree ridge (left-hand skyline)

Photos, F. D. Ayres

c
b
a

camp at 8200 ft. on the yellow talus bench about half a mile W. of Fan Glacier. On the 23rd, with sleeping bags and a light tarp added to our climbing packs, we crossed Fan Glacier, climbed several hundred feet up talus and snow, and traversed right on scree ledges to the Schauffelberger arête (the S. branch of the "Wishbone"). We then continued up the ridge, at first passing several vertical steps by use of ledges on their right or left sides, but later following the crest rather closely. At about 9000 ft., near the base of a rock tower, we built an oval enclosure of rock slabs and spent the night.

The following day, after caching the sleeping bags, we climbed the ridge, usually on its crest, to the base of a prominent black-streaked yellow wall, where we traversed 400 ft. to the right on a broad talus ledge. Thence we followed ledges and couloirs along the S. side of the ridge and finally regained the crest a few hundred feet below the junction of the two branches of the Wishbone.

After a forced bivouac on a small ledge at about 10,800 ft., we continued upward on the morning of the 25th, but finally halted at 11,200 ft., barely above the Wishbone juncture. We were making slow but steady progress on the snow ridge, which continued upward with no obvious difficulties for another thousand feet of elevation to the beginning of the ice towers. Our only security, however, was provided by a two-inch frozen crust on the snow surface. Beneath was a layer, one to two feet thick, of granular, unconsolidated snow overlying ice or ice-glazed rock. It was only 9.30 A.M., and the weather was perfect; but we decided to retreat before the crust softened in the sunlight which was now falling directly on it. There had been many snow slides from the upper slopes during the two days previous to this.

The descent over the rotten and frequently wet rock of the upper arête was slow. Three or four rappels were made. At six o'clock we were no farther down than the black and yellow wall. Faced with the certain prospect of another night out, we decided to cross over to the snow tongue in the great S.W. couloir, where we had some chance of continuing the descent in semi-darkness. The snow was steep but in reasonably good condition. Numerous snow slides from the upper slopes had gone down the couloir. We were quite impressed by the groove they had cut in the snow tongue. It was fully twelve feet wide and about as deep. Fortunately, we were able to pass

SCHAUFFELBERGER ARETE

Left: High point visible in picture is junction of two branches of "Wishbone," 2000 feet below summit

Right: Ledge on south side of arête, at about 10,400 feet

Photos, F. D. Ayres

through a bottleneck in the couloir before the light failed. Here a judicious selection of route was necessary, to keep us out of the glazed avalanche chute.

By 2.00 A.M. we were willing once more to sit on a rock ledge. Eventually, we found one which would accommodate us on the E. side of the couloir. We dozed there until five o'clock. With return of daylight, we discovered that we were only a short distance above a series of scree terraces. We quickly descended over these to the yellow band, which we then followed back to our camp near Fan Glacier (9.30 A.M., July 26th). The sleeping bags were recovered from the 9000-ft. bivouac later in the day.

FRED D. AYRES

First Ascent of Mt. Willerval. Mt. Willerval (10,400 ft.) is situated on the S. side of the Alexandra River Valley between Amery and Ridges Creeks, about seven miles W. of the Banff-Jasper Highway. The peak was climbed on 12 July 1951 by A. E. Creswell and Fred Ayres. Our approach was along the Alexandra River, then S. up Amery Creek Valley nearly to its head, where we were directly under the towering E. cliff of Willerval. The cliff continued S. and E. in a sweeping curve, completely enclosing the upper valley. We surmounted this wall by means of a talus slope whose upper tip connected with a band of ledges running horizontally southward along the face of the wall for about 500 ft. to the hanging glacier between Willerval and Mt. Monchy, next peak S. From the rock saddle above the glacier, we continued N. for three-eighths of a mile along the western base of the summit tower of Willerval to its N.W. corner, where a broken area enabled us to reach the summit snow field. From here it was an easy walk on snow to the top. Descent was by the same route.

F.D.A.

Unnamed Peak N. E. of Mt. Erasmus. This mountain (about 10,400 ft.), prominently visible from the Banff-Jasper Highway N. of the Saskatchewan Bridge, was climbed on 28 June 1951 by A. E. Creswell and Fred Ayres. It stands just across the river from the highway, three-quarters of a mile N.E. of Mt. Erasmus, and rises 5600 ft. above river level. At 4.45 A.M. we forded the N. Saskatche-

wan with some difficulty near mile 90.4 and entered the valley between our mountain and Survey Peak. Following the main drainage stream of the valley, we reached the S. base of the objective peak at an early hour, but lost much time reconnoitering before we found a route up the wall encircling the summit. Near the middle of the S. face, a long, snow-filled and occasionally icy couloir led us eventually to the summit, which was covered with snow at this date. We descended by the same route and recrossed the cold N. Saskatchewan River at 11.10 P.M. Evidently this was a first ascent.

F.D.A.

N. Wing of the Columbia Group. This note calls attention to a recently issued reedition (dated 1947) of the Jasper Park South Sheet (1936: 3 mi. to 1 in.), on which the central area, blank in the 1942 reprint, has been completed in contours. No nomenclature has been added, and the elevations do not deviate greatly from the provisional figures given in the writer's article in the *A.J.* for 1936 (with accompanying sketch map) and in the 1943 revised edition of the *Climber's Guide*.

Gong Lake is approximately 5800 ft., while the snow field draining to it covers some eight square miles and is continuous with an additional glacial shelf extending to the N. face of Diadem Peak and sending streams to the Sunwapta River. Indeed, the glaciation forms an almost continuous arc on the watershed around the head of Lynx Creek, N. of Mt. Alberta.

Mt. Confederation (unnamed) attains not quite 10,000 ft. The surprising feature is the elevation of slightly more than 10,600 ft. given to the highest peak on the S. margin of the Gong snow field, making it the loftiest point N. of Diadem Peak within the convergent Athabaska-Sunwapta angle. The ascent of this peak in the summer of 1951 is described in a note by C. A. Wilts, below.

The two northerly peaks in the Whirlpool-Athabaska angle reach 9600 ft. They rise N. of Mt. Fryatt, on either side of the stream from Geraldine Lakes, and are striking because of the low elevation (4000 ft.) of the river valley.

The map may be obtained from the May Distribution Office, Department of Mines and Technical Surveys, Ottawa.

J. Monroe Thorington

N. of Mt. Alberta. Until recently, a group of six peaks just N. of Mt. Alberta in Jasper National Park remained unexplored. They form a semicircle at the N. end of the Lynx Creek Valley and range in altitude from 9700 ft. to 10,700 ft. Several of them are described by Thorington in the *Climber's Guide,* but it appears that his elevations are definitely low.

The three easternmost peaks which have been ascended are tentatively named Mt. Gec (10,500 ft.), Mt. Nelson (10,300 ft.) and Mt. Smythe (10,700 ft.). The first of these was climbed in 1948, at which time a new short approach to the region was established from the E. (*C.A.J.,* 1949). Sickness in the party prevented attempts on the other peaks.

In August 1951 a party from southern California made another trip into the region. The five members were Gil Roberts, Dale and Frances Ebersbacher, and Charles and Ellen Wilts. Although cursed with very stormy weather, we attempted—and climbed—the other two peaks mentioned above. Mt. Smythe, the highest peak in the area, was climbed in 17 hours by Roberts and Charles and Ellen Wilts. The route lay up the S. face, thence across the left flank of a small hanging glacier to the N.W. arête, then up the arête with two traverses out on the N. face. We thought the ascent very hazardous, because of the ice and snow left by storms of the preceding three days. A snowstorm started about noon on the day of the ascent. The difficulty was such that we considered the use of pitons (about eight) imperative.

Ascent of the other peak, Mt. Nelson, was accomplished by all members of the party on the relatively easy W. side. A storm which had started during the night continued throughout the ascent and left nearly six inches of fresh snow on the mountain. On this account, the final traverse of the S. ridge to the summit was nerve-racking. It was, however, easily accomplished.

The three peaks to the W. are apparently still unclimbed. The westernmost two seemed to offer no interesting problems for the climber, and stormy weather prevented an attempt on the Rock Tower (10,400 ft.).

CHARLES A. WILTS

Alpine Club of Canada, 1951. It had been hoped to hold the annual summer camp in the French Military Group (Kananaskis area) in 1951. Intensive reconnaissance failed to find any campsite that was sufficiently close to the main climbing and at the same time sufficiently accessible from rail and highway. It was necessary to compromise on the better known but nevertheless very well liked Lake O'Hara area, in the Lake Louise Group.

The camp, attended by about 150 members and visitors, was very successful; it produced a phenomenal amount of climbing, thanks to the presence of two professional Swiss guides and to good weather and good conditions on the peaks. Just about everything in sight—literally—was climbed, most of the peaks more than once. Our friends in Chateau Lake Louise had a great thrill through the telescope—daily parties in plain sight on the summit ridge. It was not possible, however, to climb the ridge throughout the period of the camp; and many of the earlier climbs had to be done from the W. side, following the ridge only in the last mile or so. In the latter part of the camp, the ridge was in excellent condition and of course provided a much more interesting climb; during the same period, Hungabee was in good condition and was climbed on three successive days. Lefroy, Biddle, Huber, Odaray, Park, Schaeffer, Wiwaxy, Yukness, Cathedral (a long trek from camp) were also climbed, and much instruction was given in rock and snow work. Ringrose and Glacier Peak were avoided on account of rotten rock and avalanches, respectively. Mitre was climbed in stride, on the two-day, five-pass trip round to Paradise Valley and back.

The year has seen several reconnaissances, and others are in view. It is the policy of the A. C. C. to plan its camps well in advance. Reconnaissances, apart from that of the French Group already mentioned, were negative in the region of the upper Chaba River, leading to Mt. Quincy and others, and in the Toby Creek area, in the Purcells, where it was hoped we might enter new ground, different from the Lake of the Hanging Glaciers where our 1928 camp was and the Bugaboos where we were in 1946.

For 1952 we will camp at Mt. Assiniboine, with an outlying camp to reach Eon and Aye, we hope, as well as lesser peaks like Alcantara, Brussilof, Gloria, Aurora. Meantime, reconnaissance will be carried out in the headwaters of the Whirlpool with a view to camping in the Scott Glacier area; and also in the Kinbasket River

area, leading to the southern and western drainage of the Clemenceau Ice Field and Mt. Tsar. Could we but have a road to Fortress Pass, to camp in the Chaba, leading to some fine peaks, would be easy.

There were a few private expeditions of note, the major one being that undertaken by the Vancouver Section of the Club, in the Badshot Range. Some good news is that there may be, eventually, a road over Moberly Pass, bringing us close under Mt. Sir Sandford and within reach, by high-level trails, of the Adamant Group. We hope this is not wishful thinking.

The Sections were active as usual; but, in the case of the West Coast, activities were curtailed during the summer by the excessively dry weather. During this time travel in the forests was closed, on account of fire hazard. Vancouver carried out a number of "Search and Rescue" schemes, training service men in mountain techniques. Edmonton and Calgary, besides their considerable climbing programs, did a good deal of skiing; and the two sections collaborated at the Columbia Ice Field for summer climbing and instruction. Ottawa and Montreal also collaborated, and considerable rock climbing training was undertaken for Club members as also to assist the McGill University Outing Club. As in the West, skiing was much in evidence.

In New Zealand, Dr. Noel Odell and Mrs. Odell were active in the Southern Alps and attended the jubilee celebrations of the New Zealand Alpine Club.

A number of A. C. C. members visited Europe during the summer, including the Alps.

The ski camp in the Little Yoho Valley was a success; and all skiers look forward to the 1952 camp, at Mt. Assiniboine, which will be held in the last week of March, using air-lift.

Scientific work has received attention, and the Scientific Section of the *C. A. J.* is being resuscitated. "Graduating Climbs" have been revised both because of the steadily improving standard of climbing and the steadily widening scope of knowledge of the Canadian mountains. Safety has also received attention, and we have agreed to cooperate with the A. A. C. in this respect. Plans are in train to organize rescue party drills, to cut delays to a minimum in getting parties going.

Unfortunately, it has been necessary to raise subscriptions slightly,

owing to the increased cost of all services. The increase is offset, however, in the case of families, by the introduction of a "family subscription" at a reduced rate, provided husband and wife are content to receive only one copy of Club publications between them instead of one each as in the past.

A. O. Wheeler

South America

Argentine-Chile boundary. The first ascent of Mt. Fitzroy (11,500 ft.) in Patagonia is reported to have been made in January 1952 by two French climbers, members of a party from the Section Lyonnaise of the Club Alpin Français. Fitzroy, a spectacular 6000-ft. shaft of granite, rises from the eastern edge of the ice cap near Lake Viedma. Fine photographs of it, and of this incompletely known area, are to be found in a book *Andes Patagonicos* by Agostini, published in 1941 at Buenos Aires.

Aconcagua. It was reported some months ago that an Argentine military mission had set up three huts on Aconcagua, at 4200 m., 6400 m. and 6700 m. The last, which is the highest in the world, is named for General Perón. In February 1952 it was reported that two priests had carried a statue of Our Lady of Carmel to the summit, placed it in an improvised sanctuary, and offered mass.

Europe

Grandes Jorasses. On 6 August 1951, after four days of extraordinarily difficult climbing, in bad weather, A. Heckmair and H. Köllensperger completed the Cassin route on the N. face of the Grandes Jorasses. Guides and *chasseurs,* headed by Lionel Terray, had turned out to search for them. The news recalls Heckmair's participation in attempts on the Grandes Jorasses and the Eiger Nordwand during the 1930's.

Undercutting the Monarch. We have heard talk about a funicular on the Matterhorn. Now it is reported that this spring actual drilling will begin for a seven-mile highway tunnel, 50 ft. wide and

15 ft. high, through Mont Blanc. "The outlook is rosy," says *Time* (4 February 1952, p. 20). But some travellers, with a taste for visual effects other than those to be observed in tunnels, may still elect to go from Chamonix to the Val d'Aosta by other routes.

Tignes. Even mountaineers who have never been in the Val d'Isère, who know it only through the affectionate accounts by frequenters of the region, must notice with regret the abandonment and inundation of Tignes. Not quite a mile down the valley from Tignes, a great dam has been constructed. The project, which was proposed first in 1941, was revived in 1946 and pushed to completion, despite protests, with the assistance of ECA funds. In March 1952 the escape valves were closed, and the river began backing up. The last resistance of the Tignards was widely reported.* One of them spoke memorably as he watched the removal, somewhat bungled, of the church bells: "They are our soul. They should have been the last to go." For sympathetic outsiders, the late Michael Roberts had already spoken in the poem "Tignes, 1946," reprinted in the *Alpine Annual 1950:* "All things must perish now under the level water. . . ."

Dirt Band Project: Glacier du Géant. In 1947 this journal published an account of the laying out of a row of piles of small, brilliantly colored glass beads on the plateau of the Glacier du Géant.** It is expected that this row of beads, after being buried in the Géant icefall, will emerge on the lower outrun of the Mer de Glace, beneath the séracs of the icefall, in the mid-sixties.

In June 1951, accompanied by Francesco Saluard, of Courmayeur, I revisited the same site on the plateau of the Glacier du Géant and laid out, for good measure, a new row of piles of beads. Each pile contained about a handful of beads about 1/16 of an inch in diameter and was laid down three meters from its neighbor. The piles were alternately of all indigo blue or bright scarlet beads. There were 50 piles in all, extending over a distance of 150 meters and running directly uphill toward the Col de Brenva. The location of this row was as nearly identical with that of the 1946 row as it could be made without surveying instruments. JOEL E. FISHER

* *New York Times,* 8, 18, 21, 25 March 1952; *Time,* 31 March 1952, p. 30; *Life,* 31 March 1952, pp. 22-5.

** Joel E. Fisher, "American Alpine Club Research Fund, 1946: 2. Studies on Forbes Dirt Bands," *A.A.J.,* VI (1947), 328-32.

Asia

British Everest Expedition, 1951. Early in 1951 the Royal Geographical Society and the Alpine Club received permission from the Government of Nepal to send an expedition to the S. side of Mt. Everest. Mr. Eric Shipton was selected to lead the party, which consisted originally of W. H. Murray, T. Bourdillon and M. Ward and was joined later by H. E. Riddiford and E. P. Hillary. Plans were made for a serious attempt to climb the mountain, should a promising route be found; but the expedition was officially called a "reconnaissance."

The party left railhead at Jogbani on August 27th, while the monsoon was still active, and reached Namche Bazar on September 22nd. They had some trouble in obtaining porters at this inhospitable season of the year, and apparently were unable to decide which of several routes to follow. The trip—which should have been a delightful fortnight's march through the lovely valleys of Nepal—was made tedious and unpleasant by the rains, which kept the rivers and their feeder streams in full spate. Thus, during the rains, small streams which had been no problem for the Houston party in October 1950 were impassable.*

The lamasery of Thangboche impressed the British expedition greatly, and the lamas were very hospitable. Surely the view from this lovely spot must be one of the finest of Everest from any angle, and the small monastery on the steep shoulder is almost too theatrical to be true. The party did not linger here, tempting though the lamasery was, but hurried up the valley, turning westward up the Khombu Glacier below Pumori on October 1st. During the next days, four of the party made a determined effort to penetrate the West Cwm, climbing up through fearfully broken séracs of the great icefall to a point estimated at just over 20,000 ft. Conditions were so bad that the route was considered unsafe for laden porters: the snow was often hip-deep, the séracs were very unstable, and the party was nearly carried away by an avalanche set off by their passage. They decided to wait a fortnight before repeating their attempt. No avalanches fell from the precipitous sides of this narrow valley—a

* See Elizabeth S. Cowles and C. S. Houston, "North to Everest," *A.A.J.*, VIII (1951), 1-21.—*Ed.*

danger which is not inconsiderable and which, added to the obvious hazards and difficulties of the icefall, made Tilman and me consider this route impracticable.

The party then split into two groups. Murray, Ward, Bourdillon and Riddiford set out to explore the valleys and glaciers to the W. of the Khombu Glacier, notably the Ngojumba, which rises from the S. slopes of Cho Oyu (26,750 ft.) and Gyachung Kang (25,910 ft.). Without much difficulty, they crossed a 20,000-ft. pass at the head of the smooth, nearly level glacier (unnamed) which runs due W. from the Khombu, directly beneath Pumori, and found themselves in the icefall below the Nup La. From this point they examined the S. face of Cho Oyu (which did not look inviting), attempted unsuccessfully to reach the Nup La (the saddle of which had been reached from the N. in 1921), and finally followed the Ngojumba Valley down to Namche Bazar, later rejoining the other party at base camp.

Meanwhile, Shipton and Hillary had gone up the Imja Glacier, which lies directly S. of Lhotse and rises under the E. face of the Everest massif. At its head, beneath the E. face of Lhotse and the S. wall of Pethangtse, they had spectacular views of Makalu (27,800 ft.). They crossed a pass into the Hongu Valley, beneath Chamlang (24,000 ft.), paralleling the upper Kosi Valley, and then crossed back into the upper Kosi Valley and regained base camp.

During the latter half of October, the reunited party again made a determined effort to reach the floor of the West Cwm and examine the slopes leading to the South Col (25,850 ft.) between Lhotse and the summit cone of Everest. They found the passage of the icefall even more difficult than it had been earlier, for the crevasses had changed greatly and the snow was still unconsolidated. Several large séracs gave way as the party passed near them. Despite these difficulties, they were able to reach the floor of the great valley at the head of the steepest portion of the icefall—only to find that this section, which they had hoped would be relatively unbroken, did in fact slope upwards at a sufficient angle to be badly broken by wide and long crevasses. Regretfully, they turned back and went down to Namche Bazar.

In spite of the difficulties and considerable dangers of the icefall at the entrance to the West Cwm, Shipton states: "We are satisfied that, given favourable snow conditions, there is a practicable route

from the Western Cwm to the summit of Mt. Everest."* This route appears to run up the steep snow slopes which fall from Lhotse and the South Col to the foot of the final pyramid, and thence up the true S. face of Everest. Shipton believes that the difficulties of the final 2000 ft. from the South Col to the summit are not great. He does not speak of the probable difficulties on the steep slopes below the South Col, but considers the crux of the climb to be in the passage of the icefall into the West Cwm.

After the beginning of October, the party encountered exceptionally clear and good weather; they were not greatly troubled by cold or wind at the altitudes reached. They did, however, note winds of great velocity on the upper reaches of all the great peaks — winds which are probably responsible for the freedom of the peaks from snow. Tilman and I made the same observations at about the same time in the preceding year; but, since wind is a problem of Everest before the monsoon as well as after, neither wind nor cold should be the decisive factor in a post-monsoon attempt.

This reconnaissance examined a large area of previously little-known Nepal and brought back answers to some of the puzzling geographical questions which surround this magnificent range. Their energy and perseverance enabled them to cover much territory, and their photographs should be both beautiful and valuable.

From the climber's point of view, their observations are less satisfactory. The entrance to the West Cwm is a formidable and dangerous passage. Shipton's party took considerable risks which they saw need of justifying in their published articles. When Tilman and I examined this route from the lower slopes of Pumori in 1950, we felt — as we still feel — that the masses of snow and ice which lie high on the steep walls of each side of the narrow defile present a real and significant danger. Furthermore, we believed that the icefall would not offer a route which would be feasible and safe for laden porters. The fact that Shipton's strong and able party failed on two occasions to reach the floor of the Cwm, despite considerable effort and daring, confirms me in my belief that this is not a *practicable* route to Everest.

---

* "Looking Back on Everest," *The Times*, 21 Dec. 1951, p. 7 (reprinted in *The Times Mt. Everest Reconnaissance Expedition 1951 Supplement*, Dec. 1951, p. 15).—*Ed.*

Moreover, the slope from the West Cwm upwards to the South Col is not very attractive. It is a steep slope, nearly 3000 ft. in extent, broken by huge séracs. Its exposure is the same as that of the W. face of the North Col, where Tilman in 1938 described the "father and mother of all avalanches," and which he and Odell, who climbed it, regarded as dangerous. There would seem to be no valid reason to hope that the similar slope from the South Col would be much different. Finally, there are the last few thousand feet to the summit. On the S. side of the mountain, the strata slope more favorably, the sun is able more beneficently to modify the bitter cold, the snow may be better consolidated (unless blown clear, as when we saw it), and a route may well exist. But it has not been seen except from afar.

I am in sympathy with Shipton's reluctance to expose porters to the danger of repeated passage of a dangerous route. Native porters must remain a trust and a responsibility of their climbing leaders. Having less judgment than strength, they must be chaperoned through serious difficulties; and the conscientious climber will put their welfare above his own. On earlier Everest climbs, Odell and again Longland showed this devotion. Pasang Kikuli showed the same devotion when he gave up his life in his almost incredible attempt to rescue Dudley Wolfe on K2 in 1939. Those Himalayan parties which fail to guard their porters are unworthy of the great tradition created by their predecessors.

The baleful light of publicity which shines on Everest has induced something of that nationalistic attitude so strongly deplored by Irving a generation ago. According to a statement in *The Times,* "From that year [1938] until the reconnaissance of 1951 Everest remained unvisited by man, except for one day in 1942 when Colonel Scott, commander of an American pursuit group in China, flew over the peak in his aircraft." This is inaccurate and ungracious: it ignores Denham, who visited Everest from the N. in 1947; St. George, who entered Solah Khombu in 1949; my father's party of 1950, which first examined the S. side of Everest; and numbers of pilots, of various nationalities, who have flown around the peak on unofficial "errands."

In these days, when the free world is menaced, when "sport" is a word hard pressed to survive, it is sad that brother nations like ours, the British, the French and the Swiss, should feel it necessary to

compete in "national" expeditions among the great mountains, whose beauty and magnificence far transcend man's silly struggles. Yet this very summer we may watch a competition on the S. side of Everest between the Swiss* and the British—and the huge, 150-man Russian expedition on the N. *O tempora, O mores!*

CHARLES S. HOUSTON

Abominable Snowman. Again the abominable snowman has caused a furore. Eric Shipton, leader of the post-monsoon British reconnaissance expedition to the S. side of Mount Everest, brought back excellent photographs of what his Sherpa porters declared were "yeti" tracks. They appeared to show "three broad 'toes' and a broad 'thumb' to the side." This "snowman" had jumped crevasses during its progress down a mile of snow-covered glacier. When he saw these tracks, one of Shipton's Sherpas described to him a "yeti" he once saw, a "half man half beast, about five feet six inches tall, covered with reddish-brown hair but with a hairless face." Shipton's photographs brought immediate publicity and all sorts of legends, such as the one that snowmen leave strange tracks because "their feet turn backward to make mountain climbing easier." Others claimed that the snowmen were missing links. But despite these exotic surmises about the "thing," the tracks of Shipton's abominable snowman look abominably like those of some abominable Himalayan bear.

Panch Chuli. Heinrich Harrer was one of two well-known German mountaineers who escaped from an Allied prison camp during the war and took refuge in Tibet. During the summer of 1951 Harrer, with New Zealander Frank Thomas, two Sherpas and minimum equipment made a serious attempt on 22,650-ft. Panch Chuli in the Almora District of northern India. Base camp on this peak, previously attempted by several expeditions but never climbed, was established at 13,500 ft. Above this point avalanche danger,

* The members of the Swiss expedition, led by Dr. Wyss-Dunant, are André Roch, René Dittert, René Aubert, Raymond Lambert, Léon Flory, Jean-Jacques Asper, Dr. Gabriel Chevalley, Ernst Hofstetter, Prof. Augustin Lombard (geologist) and Albert Zimmermann (botanist). They have long climbed together. Their equipment is reported to include double tents lined with swan's-down, inflated rubber sleeping bags and oxygen apparatus, weighing 22 lbs. per man, "for the final assault on the mountain." A report of 3 June 1952 from Katmandu indicates that both the Swiss expedition to Everest and the British expedition to Cho Oyu have been cut short by bad weather.—*Ed.*

caused by heavy snows, was considerable; and the party was in a critical position more than once before establishing camp on a plateau at about 20,000 ft. The snow was in poor condition; during the unsuccessful attempt to reach the summit from here, two minor slips occurred. On the descent to base camp Harrer and a porter were carried down by a snow slide, but all four reached base camp safely. More than 400 different flowers were collected in the area by a member of the Forest Research Institute in Dehra Dun, who accompanied the party.

Trisul. The third ascent of Trisul (23,260 ft.) was made by R. D. Greenwood and Gurdial Singh of Dehra Dun on 25 June 1951. Greenwood, who is an instructor at the National Defence Academy, later climbed Ratanban (20,000 ft.) and also reached a point only 500 ft. below the summit of Mrigtuni Peak (22,490 ft.). Trisul had been climbed previously in 1897 and 1933.

Mukut Parbat. Anderson Bakewell, S. J., reports that a New Zealand party led by H. E. Riddiford climbed Mukut Parbat (23,760 ft.) in July 1951.

Narayan Parbat. A report from Naini Tal, also in July 1951, tells of a three-month journey by two Swiss mountaineers in the Badrinath area. Bad weather prevented exploration of many high peaks; but the two, who used no porters the entire time, succeeded in climbing Narayan Parbat.

Cosmic Ray Research in the Himalayas. According to a clipping from the *Statesman* of 22 July 1951, an international party consisting of Dr. L. F. Curtiss, of the National Bureau of Standards in Washington, Dr. P. S. Gill, and Mr. Basir Khan, of Aligarh University, have been studying slow neutrons in cosmic rays on 13,600-ft. Mount Apharwat and other high points near Gulmarg.

New Zealand

A. P. Harper and the New Zealand A. C. The accompanying photograph of Arthur P. Harper, Honorary Member of the A. A. C., was taken by N. E. Odell at The Hermitage, hotel at 2500 ft. in the Southern Alps of New Zealand, on the occasion of the 60th anniversary meeting of the New Zealand Alpine Club, 2 June 1951. Mr. Harper founded the N. Z. A. C. in 1891. He is now 88 years

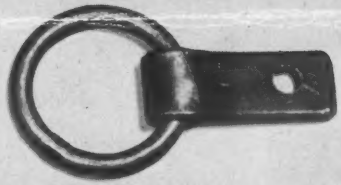
OUR HONORARY MEMBER ARTHUR P. HARPER
With L. V. Bryant at the N.Z.A.C. Jubilee

Photo, N. E. Odell

DRILL AND DRILLHOLDER
Note neckstrap

ANGLE HANGER

FILE



RING HANGER

RAWL-DRIVE (Stud Type)
¼" by 1½"

RAWL-DRIVE (Round head)
¼" by 3"

RAWL-DRIVE (Stud Type)

TOOL REMOVER

RUBBER HOSE

old, but still very keen and interested in the Club and its members. The other man in the picture is L. V. Bryant, who was a member of the 1935 Mt. Everest "test" expedition. Mt. Sefton (10,360 ft.) rises in the background. Mt. Cook is out of sight to the right, about six miles N.

Mr. Harper's *Pioneer Work in the Alps of New Zealand* (1896) is in our library, as is also a complete set of the excellent journal of the N. Z. A. C. The Club is a strong, vigorous organization of about 800 members. Huts are built, often by the members themselves, and maintained by the various sections. Christchurch and Dunedin are almost within sight of the high mountains. Week-end climbing can be enjoyed from both. New ascents and even exploration have been possible on short vacations until very recently—and may still be. John Pascoe's *Unclimbed New Zealand* (1939) is another fine book in our library.

Mr. Harper is to be heartily congratulated on the splendid club he founded, on the development of the sport of mountaineering in his country, and on his own long span of life. He is a living example to us of the benefits which can accrue from the pursuit of mountaineering as a recreation over a long period of years.

H. S. Hall, Jr.

Equipment

Modified Wide-Angle Pitons. Wide-angle pitons have been used to some extent in cracks up to two inches wide[1]—chiefly, owing to defects in design, in places where only minimum strength has been required. These wide-angle pitons were pointed at the end and then tapered out at the butt to a width of one to two inches. Since most wide cracks have approximately parallel surfaces, these pitons, being of very high pitch or slope, would make contact with the rock, on being driven in, only at three points and not on three edges. Obviously, it would take very little force to pivot the driven piton on these points and make it wiggle loose.

Edge-to-rock contact can be obtained if the taper or slope of the wide-angle piton is decreased. The modification results in a blunt-nosed piton. The best slope was found to be about ¼ of an inch per five inches in length. Other dimensions: length, five to seven inches;

[1] Cf. Fred Beckey, "New Ascents in the Cashmere Crags," *A.A.J.*, VIII (1951), 173-4.

ROCK ANCHOR (BOLT) SET

Photo, P. K. Schoening

width at the blunt point, ¾—1½ inches. The butt end should be welded, to increase strength and prevent spreading. Other features are similar to those of the regular angle piton. Limitation of maximum size is dependent upon metal strength (proportional to metal thickness) and thus on the weight that one is willing to carry.

P. K. SCHOENING

The Rock Anchor (Bolt) Set. Increasing numbers of rock climbers, with and without a fancy for technical undertakings, have begun to add the rock anchor set to their supplies of hardware.[2] The equipment was originally developed for purposes of direct aid, but it has proved valuable in other ways, *e.g.,* in the fixing of belay, safety and rappel anchors. The rock anchor has a strength of about 3000 lbs.; pitons have strength varying between 300 and slightly over 2000 lbs.

The usefulness of the anchor depends on the type of rock encountered. On hard rock failure of a drill or consumption of too much time may constitute a limitation.[3] Average granite requires about four minutes of drilling and only slightly dulls the drill. If a climber's position is such that a sound anchor is needed, expenditure of more time in drilling may be quite acceptable. Often the finding of a good crack and the insertion of a piton take 15 minutes or more. Comparing the strength of a piton with that of a bolt, one realizes that the time spent in fixing the latter may be well spent. On softer rock there is probably no limitation—since progressively longer anchors can be used to obtain the required strength. Anchors up to three inches long have been used successfully. If the rock were much softer (and the desire to climb persisted), some other device could be found, *e.g.,* a large nail.[4]

A very useful rock anchor (bolt) set includes: (1) two ¼-inch three-fluted Rawl twist drills (masonry); (2) a No. 14 drill holder, cut off, with a hole in the handle and a safety cord attached; (3) three ft. of ¼-inch rubber tubing for cleaning the holes; (4) ten ¼-inch Rawl-drives (stud type), five of them 1½ inches long for harder rock and five two inches long for softer rock; (5) five hangers, preferably of the ring type. Amazingly, the weight of this set is about 1¼ lbs.

P. K. S.

[2] Cf. P. Schoening, "Rawl-Drive Climbing Anchor," *A.A.J.,* VIII (1951), 206-9.
[3] Cf. p. 345 above.
[4] See P. K. Schoening, "Pinnacle Summits via Rock Anchors," *Mountaineer,* XLIII (1952).

COMMITTEES OF THE CLUB, 1952

CONSERVATION. William P. House, *Chairman;* Henry I. Baldwin, James Bonner, Richard M. Leonard.

ENTERTAINMENT. Ursula Corning, *Chairman;* Mrs. Arthur L. Erlanger, Duncan A. MacInnes, Henry E. Mills.

FINANCE. Henry S. Kingman, *Chairman;* Joel E. Fisher, Henry S. Hall, Jr., M. Albert Linton, David W. Measuroll.

HOUSE. William O. Field, *Chairman;* Helen I. Buck, William R. Hainsworth, Henry E. Mills, J. Monroe Thorington, Walter A. Wood.

LIBRARY. Helen I. Buck, *Chairman;* Edward Cushing, Herbert J. Kothe.

MEMBERSHIP. Bradley B. Gilman, *Chairman;* Henry S. Hall, Jr., John C. Oberlin.

MOUNTAIN AND COLD WEATHER TRAINING. John C. Case, *Chairman;* Robert H. Bates, A. L. Washburn.

NOMINATING. William P. House, *Chairman;* Lillian Gest, Roger S. Whitney, George MacGowan, Carlton P. Fuller.

SAFETY. Maynard M. Miller, *Chairman;* John F. Fralick (*Acting Chairman*), Ome Daiber, Benjamin G. Ferris, Jr., Hans Kraus, Richard M. Leonard, Hassler Whitney.

All communications should be addressed to the Club Rooms. Back numbers of most issues of the *American Alpine Journal* may be had on application. The price of the current issue is $3.00 per copy.

Information concerning possible articles and notes should be forwarded to the Editors at the earliest opportunity.